NAVY ENLISTED PERSONNEL CHARACTERISTICS

- PRELIMINARY ANALYSIS -

30 JUNE 1976

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PREPARED FOR
NAVY TECHNICAL INFORMATION
PRESENTATION PROGRAM
DAVID W. TAYLOR NAVAL SHIP R & D CENTER

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This report is a preliminary analysis of enlisted personnel characteristics. Mental group, education, reading ability, and manning information is reported for total enlisted, accessions, pay grades, and ratings/occupation groups for selected years between 1960 and 1975. The most salient aspects of this information, including trends, are discussed, and various conclusions and implications are drawn from the data contained in the tables and figures.

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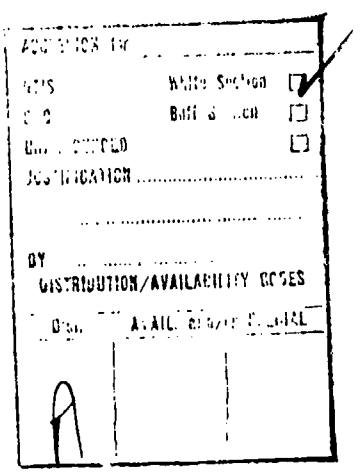


I. INTRODUCTION

Complaints from a number of Navy activities indicate that a significant number of Navy technical manuals (TMs) are deficient. One major deficiency in many TMs apparently has to do with poor quality of presentation modes for transmitting information essential to performing operator and maintenance tasks. A common criticism is that many TMs are difficult to use. That is to say, writing levels are not matched to user abilities; there is an inadequate balance among "what to do," "how to do" and "why"; formats are not standardized; etc. Such defective TMs can have an adverse effect on Fleet operational readiness if these TMs are critical to the satisfactory performance of certain operator and maintenance tasks. The Navy Technical Information Presentation Program (NTIPP) was created and funded as a major effort to find solutions to these problems.

A major assumption behind any endeavor to eliminate the kinds of defects described above is that there is a causal relationship between TM quality and user performance. Put simply, it is assumed that the capability of maintenance technicians to perform troubleshooting tasks, for example, on a piece of hardware is dependent in part upon the capacity of the related technical manual to present troubleshooting procedures in a manner which is comprehensible to the technician. As such, this aspect of the TM question can be defined as a technical information presentation problem which, because of an apparent mismatch between the information vehicle (the TM) and the information user (the technician), often results in unsatisfactory operation/maintenance performance -- i.e., either from misunderstanding or non-use of the TM. Therefore, if user characteristics can be better matched with the vehicle through which technical information

is presented (the TM), presumably operator and maintenance performance will improve.

The obvious first step in pursuing this last point is to develop a profile of those characteristics of personnel which predictably bear a relationship to a person's ability to comprehend printed materials, and, accordingly, represent critical elements to be considered in selecting formats for presenting technical information. This publication is a first attempt, from a limited number of sources, at reporting those kinds of personnel characteristics. A more thorough investigation will be completed in FY 77 using data from the "enlisted master tapes file" of the Chief of Naval Personnel.

Two general kinds of information were examined -- on-board strength counts and requirements, and aptitude and years-of-education (schooling) -- for total enlisted personnel and for the sub-populations of recruits, pay grades, and rating/occupation groups. Sex, age, and race, as variables, were also examined for total enlisted personnel. Trend information is presented by fiscal years, in some cases going back to the early 1960's for total enlisted and recruit inputs, and for the years 64, 65, 72, 73, 74, and 75 for pay grades and rating/occupation groups.

The trend analyses, particularly pre- and post-Vietnam comparisons, are made because of their importance for the most reasonable predictions about the future. On-board strength/requirements is the index of quantity, and aptitude/schooling is used as an index of quality in developing a profile by enlisted accessions, pay grades, and ratings. While only a preliminary analysis, this report is intended to present some useful descriptions of enlisted personnel, both in total and by sub-populations.

There are few published studies which provided detailed information on Navy enlisted personnel, and, except for the Navy Enlisted Occupation Classification Study (NEOCS) report, none was found which gives information by ratings and pay grades. Most of the data in the tables was developed from reports and printouts furnished by the Chief of Naval Personnel (Pers 362b), and some from the NEOCS report.

II. FINDINGS

TOTAL PERSONNEL

Strength/Requirements (Table 1)

Total enlisted strength has leveled off at just less than a half million personnel since the end of the Vietnamese conflict. Enlisted strengths had risen steadily from a FY 60 figure of 544,040 to 684,145 in FY 69, the peak of U.S. involvement in Southeast Asia, but by FY 72, the Navy was down to 510,669 enlisted personnel, and in FY 75, the 465,522 count marked the least number of enlisted personnel in fifteen years.

Sex (Table 2)

Males comprise the vast majority of total enlisted, at 96.3% of the total in FY 75. However, an increased proportion of women in the Navy since 1970, while not dramatic, at least has been fairly substantial as compared to the seven years prior to 1970. Although figures for the 1963-1970 time frame show that enlisted Waves made up less than 1% of the total enlisted force for each year in that period, women rose from 1.1% to 3.7% of total enlisted between 1972 and 1975, and the actual counts more than tripled.

Age (Table 3)

Trend figures from FY 60 to the present emphasize clearly that the U.S. Navy is by far a young person's organization. No less than three of every four sailors have been under 30 years of age in each year of the 16-year period shown in Table 3, with the proportion reaching four for five or better during the Vietnam conflict.

A few interesting trends in age are discernible. Although the percent of enlisted personnel under 20 decreased markedly during the Vietnam period (down to 7.7% in 1968), there has been a steady upswing in that group since the end of the conflict (up to 19.8% in FYs 74 and 75). Although the increases were smaller, the same pattern of rising percentages since Vietnam is found for those in the age categories which span 25-to-39.

By contrast, the 20-year-olds' proportion rose during Vietnam (e.g., 16.8% in FY 67) and fell off during the post-war period (e.g., 11.0% in FY 75). A similar picture is found for the 21-to-24 age group (e.g., 46.8% in FY 69 v. 31.1% in FY 75).

Two probable happenings are suggested by the reverse trends depicted in the under-20 and 25-39 categories, on the one hand, as compared with the 20-24 categories, on the other hand. First, attracting under-20 personnel to the Navy seems to have been more reflective of pre-Vietnam recruitment accomplishments when often one sailor in five was from this category. This observation is supported by actual numbers as well as percentages. For example, in FY 69, when total enlisted counts were at a high of 684,145, only 58,836 were under 20, as compared to 92,173 of 465,522 in FY 75. Second, the drop in percentages since Vietnam for 20-to-24-year-olds and the corresponding rise for 25-39 year-olds suggests that a significant number of personnel inducted during Vietnam from the 20-24 categories (no doubt, many of them, college students and graduates) chose not to pursue a Navy career, but simply served out an obligation during the U.S. Southeast Asia commitment.

Race (Tables 4 and 5)

The most prominent racial characteristic of enlisted personnel is, and has been over the years, that sailors tend highly to be White. Presently, over 86% of the enlisted ranks are Caucasian. Although Caucasians dominate all other racial groups combined by almost nine-to-one, the percentage of Whites to non-Whites has in fact decreased by almost four percentage points since 1971. Normally, a mere four percent change would appear to be insignificant, except that there had been virtually no change in the White-to-non-White proportion over the ten-year perod prior to 1971, remaining fairly even at 9-to-1.

Blacks accounted for 8% of the enlisted ranks in FY 75, as compared to 5.42% in 1971. Like Whites, the Black percentage stayed relatively the same in the decade prior to 1971, but, unlike Whites, increased subsequent to 1971. All other racial groups represented 5.56% of enlisted personnel in FY 75, having increased slightly virtually every year after 1962.

The trend toward a slight declination in the percentage gap between Whites and non-Whites in recent years is no doubt explained by the rapid reduction in the total number of White enlisted personnel which occurred at the close of and after Vietnam. From FY 71 to FY 75, White numbers declined by about 87,000, while non-Whites, by contrast, increased by about 10,000.

There is some evidence, though hardly conclusive at this writing, that Blacks have not kept pace with other racial groups in advancing to petty officer pay grades. Table 5 shows that in calendar year 1968, the percent of Black petty officers was about the same as that for

total Black enlisted personnel (4.8% v. 5.0% respectively), but in calendar year 1972 the percent of Black petty officers rose only to 5.0%, despite an increase to 7.3% of total enlisted personnel. Yet, other non-Whites ("Other" category) reversed a slightly negative relationship of petty officers to total enlisted in 1968 to a slightly positive one in 1972. The White percentage of petty officers was similar to or slightly better than its total enlisted percentage for 1968 and 1972.

Years-of-Education: Schooling (Table 6)

One of the most salient changes among enlisted personnel in recent years has been the dramatic increase in years of civilian education. Whereas almost half of the enlisted ranks was made up of members with less than a high school educatiion in 1960, today that group comprises only about 15% of the total. A corresponding increase in high school graduates and sailors with college training has also occurred. In FY 60, 46.8% of the enlisted force were high school graduates, while in FY 75 (after even higher percentages during the Vietnamese conflict) 84.9% were high school graduates. During the same period, the proportion of personnel who attended some, or graduated from, college rose from 4.1% to 11.9%. The percent of personnel with at least a bachelor's degree rose substantially during Vietnam, and then leveled off afterward at just over 1%, but at better than twice the percentage of that before Vietnam.

Aptitude: (Table 7)

The Navy's principal indicator of potential (or aptitude) has been scores on the Basic Test Battery (BTB),* particularly scores obtained

* The Basic Test Battery was replaced by the Armed Services Vocational Aptitude Battery (ASVAB) as of 1 January 1976. Subtests of the ASVAB correspond in title with BTB subtests and include three other subtests not included formerly in personnel selection and classification.

on three subtests: General Classification Test (GCT), Arithmetic Reasoning (ARI), and Mechanical Comprehension (MECH). The entire BTB is used for screening and classification of recruits. Each of the GCT, ARI, and MECH scores is in itself a specific indicator of aptitude, while in aggregate the three scores will place a sailor in one of four basic Mental Group (MG) categories (I, II, III, IV). Mental Group I is highest, and Mental Group IV lowest, with Mental Groups I, II, and upper III defining the MG range into which a recruit must fall in order to be eligible for a Navy school. A GAM (i.e., GCT + ARI + MECH) score is converted into an AFQT (Armed Forces Qualification Test) percentile score, and a sailor's AFQT percentile score determines his mental group category. See Appendices A, B, and C for information on how MG categories are determined from GAM scores.

The percent of <u>total</u> personnel in Mental Groups I and II has risen considerably over the last decade or so. These increases began to occur during the Vietnam War, peaked between 1970-72, and leveled off after 1972, but at higher percentages for MGs I and II than before Vietnam. However, the percentage jumps have not necessarily resulted in greater counts in the upper mental groups, because of enormous differences in total strength when comparing one year with another. For example, the number of MG I personnel at the end of FY 66 (6.6% of 658,635) was actually greater than that for the end of FY 75 (8.6% of 465,522). Nevertheless, the percentage gains in upper mental groups are encouraging -- certainly consistent with, if not proportionately as great as, gains in years-of-education.

ACCESSIONS

Aptitude (Table 8)

An important question which arises from the trend of increasing years-of-education (or schooling) among enlisted personnel is whether a potentially better sailor is being recruited by the Navy today.

The analysis of trend data on GCT, ARI, and MECH performance among recruits, as well as their MG distributions, produces some interesting findings. Data in Table 8 show that, except for increases in GCT and ARI during the Vietnam War years, average scores for recruits on GCT, ARI, and MECH have remained about the same between FYs 1962-75. These figures show that average aptitude scores for recruits have remained relatively the same for the pre- and post-Vietnam years, despite the increased schooling for enlisted personnel previously described. But, what about schooling trends among recruits?

Years-of-Education: Schooling (Table 9 and 10; Figure 1)

Since Years-of-Education figures in Table 6 are for the total enlisted, they could conceivably be skewed toward more senior enlisted personnel, and therefore not truly represent the schooling profile of recruits. However, Table 9 shows that the increase in percent of high school graduates among recruits from 1962 to 1975, while not as sharp as for all enlisted personnel for that period, was at least substantial: 60.7% v. 74.9%. From a comparison of Tables 8 and 9, the evidence is strong that, while years of education have risen significantly, there has not been a corresponding rise in BTB aptitude scores, though levels of aptitude and years-of-education ought to yield a more positive correlation, reflected by proportionate increases in BTB scores.

Figure 1 lends further emphasis to this point in comparing recruit trends in percent of high school graduates who scored 20, 30, 40, 50, 60, and 70 on the GCT subtest. GCT is considered to be a fairly reliable index of a recruit's general knowledge, and presumably years-of-education should have some bearing on the magnitude of a GCT score. It can be seen that this is precisely the case for any <u>one year</u> - i.e., the higher the GCT score, the higher the percent of high school graduates. However, what Figure 1 also shows is that, almost without exception, the percent who were high school graduates for each GCT category <u>rose</u> in each year from 1966 to 1973. If the quality of high school education remained constant over this period, one would expect the percent of high school graduates for each GCT category to remain constant, too. However, the rise in percent of high school graduates from year-to-year for each GCT score suggests that the quality of a high school education, at least for those recruited by the Navy, diminished from year-to-year between 1966 and 1973.

One last piece of evidence of a leveling, if not a slight decline, for aptitude scores among recruits, despite increases in schooling, is recorded in Table 10. Ignoring the intense Vietnam War years (1966-72) when a disproportionate number of non-career, college-trained recruits were inducted, one can see that the percent of Mental Group I recruits was significantly higher before Vietnam than it has been since Vietnam, and slightly higher before than after among Mental Group II recruits. Given the fact that recruits on the average had more schooling on entering the Navy after Vietnam than those before Vietnam, it would have been reasonable similarly to have expected higher percentages in MGs I and II after, than before, Vietnam.

Reading Ability (Figures 2, 3, and 4)

A measure of reading ability has not been part of the standard battery of tests given to Navy personnel. However, it is possible to gain some insight into the ability of Navy enlisted to read from the research of a number of investigators.

Carver (October, 1973) employed an unpublished reading comprehension test to examine the reading ability of a sample of recruits. His findings showed that the average recruit read at the 9.5 level.

Duffy, Nugent, Millar, and Carter (1974) tested the reading of recruits reporting to the Recruit Training Command, San Diego between May and August, 1974. After employing the Gates-MacGinitie reading test, they found the median recruit reading grade level (RGL) to be 10.5. Fifty percent of the recruits, therefore, were reading below the 10.5 grade level, and 25% tested below the 8.7 grade level.

Having extended the study to a May 1974-May 1975 time frame, Duffy (1974) was able to report results of reading tests administered to 31,540 male recruits over an entire year's period. The mean reading score of 9.8 was consistent with Carver's 9.5. However, because scores were skewed toward the high end of the range, the median score of 10.7 was considered to be more representative of the general reading ability of the recruit population tested. Again, the 10.7 median score was consistent with the 10.5 median score for the sample of the first few months of the study.

While 63.5% of the year-long Duffy investigation read at the 10.0 grade level or better, another 18.1 performed below the 8.0 grade level. To look at it another way, more than one recruit out of three read below

the 10th grade level. See Figure 2 for Duffy's reading grade level distributions.

An interesting finding from a segment of the Duffy study which corroborates an assertion made earlier about schooling v. aptitude, was that schooling did not necessarily correlate closely to reading skills. The median reading levels for high school graduates and high school non-graduates who entered recruit training at San Diego between May and October, 1974 was 10.9 and 10.2 respectively. In fact, only a 0.13 correlation was found between reading ability and years-of-education among a subsample of 19,000 recruits in the study. See Figure 3 for Duffy's distribution of reading levels for high school graduates and non-graduates.

Another avenue explored by Duffy was the degree to which reading ability could be predicted from standard Navy tests. A stepwise multiple regression analysis of the Basic Test Battery scores of the first 7,135 recruits taking the reading test showed that GCT was the best predictor ($r = 0.73$; standard error = 1.36 RGL). This finding coincided with correlations of 0.68 and 0.82 for reading ability and general aptitude in the Army (Caylor et al, 1973) and the Air Force (Madden and Tupes, 1966) respectively.

A major key to determining the implications of reading ability scores of Navy enlisted personnel would seem to lie in an assessment of the kinds of materials read by such personnel. In this regard, a number of studies have been reported in which manuals and other printed documents essential to the professional preparation of Navy enlisted men were rated for their readability. In all cases, a well-known readability formula (e.g., FLESCH, FORCAST, etc.) was employed which could measure by specific

criteria (e.g., words per sentence, number of syllables per 100 words, etc.) the reading difficulty (readability) of a piece of written material and assign it a reading grade level (RGL).

In a study conducted by Biersner (1975) of the RGLs of 185 Navy rate training manuals (RTMs) and 188 non-resident career courses (NRCC's), it was found that the majority of the RTM's and NRCC's were written at the lower college grade level. While most of the RTM's and NRCC's were written around the 13th grade level, RGL's varied widely within each RTM and NRCC, often ranging from the seventh grade to college graduate level.

The Biersner findings on the reading difficulty of RTMs and NRCCs are consistent with several other previously conducted research efforts in which a FORCAST formula was used to measure the reading difficulty levels of training materials used by the Armed Services. Carver (September 1973) found that 20 Navy RTM's sampled by him had an average RGL of 14.8, ranging from 11.7 to 20.0. Duffy et al (1974), in an examination of Navy training manuals for firemen, seamen, and airmen, found that their RGLs were 10.18, 10.18, and 10.49 respectively; and the Blue Jacket's Manual had an average RGL of 11.50. Similarly, Mockovak (1974) found that five Air Force training manuals ranged in readability from 11.1 to 11.4, and Caylor et al (1973) found the readability of twelve Army manuals ranged from 7.6 to 12.2, with a median grade level of 10.8.

In drawing some implications from comparisons of Biersner readability scores with Duffy et al reading ability scores, Curran (1975) made some interesting, though discouraging, observations. He noted that approximately 82% of the RTM's of the Biersner study were written at the 11.0 grade level or above, while only 45% of the recruits tested by Duffy

et al read at the 11.0 grade level or above. The apparent mismatch between reading ability and reading difficulty for over half of the recruits in using the vast majority of the manuals carries critical implications if it continues to be substantiated. See Figure 4, constructed by Curran to illustrate the range of reading-readability mismatches.

Curran noted further that the manual Basic Military Requirements, the content of which must be known for advancement to E-3, had a RGL of 10.85. Given the 11.0 median reading level of the recruits tested by Duffy et al, it appeared possible though not conclusive , Curran that about half of the recruit sample might not have been able to read this manual.

Are the reading skills of Navy personnel significantly different from those of students in civilian schools? Although there are substantial indications of reading problems among American youth attending civilian schools today, there are divergent views regarding the severity of the problems. The Right to Read, an Education Briefing Paper of the U.S. Office of Education (1974), claims that "close to 19 million adults and 7 million children in the United States are functionally illiterate... in comparison with other countries. American high school graduates read less well than graduates in 12 other countries." (Note: The American system of education for all is compared with nations whose systems of education concentrate on education for a high-potential minority.)

By contrast, Sanders (1974) contends that "the number of students who cannot read is small. The number of students who will not read, who have been taught again and again to think of themselves as inadequate, slow ar disabled, and who, therefore, behave as if they are is considerable. We are not always successful in distinguishing between the two."

(Note: Yet, data substantiating the difference in readers by "can not" and "will not" is not presented.)

Larson et al (1976) reports that reading ability, as measured by the Diagnostic Reading Test, was highly stable for freshmen at the University of Florida over an 11-year period between 1960 and 1970, providing one piece of evidence of no noticeable decline recently in reading skills among high school graduates (despite a greater open-admissions policy at that school beginning in 1962). On the other hand, Kurzman (1973) reports an average RGL score of 10.4 among eighty-one freshmen tested who were taking social science courses at a New York college. A further analysis of a sample of twenty-three books from the Social Science area produced a SMOG test readability distribution of only 4 books written at the freshman (13th grade) level, with 7, 5, 6, and 2 books written at the 14th, 15th, 16th, and 17th grade levels respectively.

Despite the apparent elusiveness of the exact nature of the reading problem among students coming out of American secondary schools, as the above conflicting reports emphasize, there does seem to be a problem. In fact, Smith (1974) states that the problem of literacy among American high school graduates is regarded as sufficently serious to have caused a recent national Conference on Studies in Reading to suggest a research and development program to improve the reading and writing proficiencies of high school graduates. However, whatever the specifics of literacy problems may be, there does not seem to be anything in available literature on reading skills of high school students to indicate that personnel recruited by the Navy are less skilled than the civilian cross-section of American youth of the same age. Nevertheless, a reading problem among

youth, both civilian and military, apparently does exist, and the implications for the effectiveness and even the morale of the latter group could be serious.

PAY GRADES

Although published information on the characteristics of enlisted personnel by ratings and pay grades is very limited, a preliminary analysis of such data was developed from the sparse sources available. A detailed analysis and description based on a number of data elements recorded on the historical enlisted master tapes held by the Naval Personnel Research and Development Center will be a major section of the final report on enlisted personnel characteristics planned for early FY 77.

In investigating enlisted personnel characteristics by ratings and pay grades two kinds of information were examined: (1) strength requirements and actual on-board counts, and (2) schooling and aptitude data. It seemed that a comparison of requirements with actual counts would yield a useful picture of the quantity dimension of personnel by ratings and pay grades. A further analysis of schooling and aptitude characteristics would appear to provide at least some insight into the quality dimension of personnel by ratings and pay grades. Trends in strength requirements/counts and in mental group distributions were obtained for Fiscal Years 64, 65, 72, 73, 74, and 75, as well as schooling information for the two years just before and after Vietnam: FY 65 and FY 73. The 1966-71 period was shown earlier in this report to have been an atypical period of embellished personnel counts due to mobilization demands of

Southeast Asia, and therefore the years immediately before and after the main fighting seemed best suited to any comparisons of one period with another.

Strengths/Requirements (Table 11)

An appropriate way to examine manning levels among pay grades is to apply the Career Reenlistment Objectives (CREO) criteria (see Appendix D) used by the Chief of Naval Personnel is assessing rate manning levels within individual ratings. These criteria, however, are designed for rates (e.g., RM3) rather than simply pay grades (e.g., E3). Nevertheless, pay grade manning percentages reported in this document are an average of rate manning across all pay grades, and as such are representative of rate manning on a total enlisted basis, but not by individual rates. The CREO rate manning categories are defined as follows:

(1) Category A - Rate manning is less than 75 percent; extreme shortage of personnel in rate.

(2) Category B - Rate manning is between 75 and 89 percent; shortage of personnel in rate.

(3) Category C - Rate manning is between 90 and 105 percent; rate manning is approximately correct; management is designed to stabilize at present levels.

(4) Category D - Rate manning is in excess of 105 percent; voluntary conversions to Groups A or B ratings are recommended if rating is also Group D.

(5) Category E - Rate manning is in excess of 105 percent. Conversion may be directed on an involuntary basis.

An extremely unusual pattern of personnel clustering has existed among the apprentice pay grades (E1-E3) since FY 72. E1 and E2 pay grades have been excessively overmanned, while the E3 pay grade has been significantly undermanned. The count of seaman apprentices (E2) has been more than double the requirement for the past three years, while the count of seamen (E3) has been about 3/4 or less of the manning requirement for the same period. This kind of picture did not exist in the two years (1964-65) preceding Vietnam.

There has been a steady trend of undermanning at the E5 level, based on a comparison of years both before and after Vietnam. This is not too surprising because first-term enlistments are usually spread through pay grades E1-E4, and the strength of pay grade E5 is obviously dependent upon the number and pay grades of first-term enlistees who decide to reenlist. However, the future strength of E5's could be affected by the present over-supply of E1's and E2's. A lot depends on their motivation and potential for achieving pay grades E3 and E4, let alone any decision to reenlist. The critical question which is unanswered at this time is whether the undermanning at the E3 level is reflective of a lack of upward-mobile motivation on the part of a large percentage of E2's or simply a temporary slack in one section of an otherwise more proportionately spread E1-to-E4 continuum.

The upper supervisory pay grades continue to be short of required strength. In 1964-65, however, the most noticeable shortage was in E9's, but since the close of Vietnam hostilities, this pay grade has improved slightly while manning for E8's has worsened a bit.

Aptitude (Table 12)

Two appropriate comparisons to be made from data in Table 12 are: FYs 64-65 v. FYs 74-75, and trends by years in the FYs 72-75 period. The comparison of FYs 64-65 with FYs 74-75 reveals that the supervisory pay grades (E7 to E9) generally fell off in the percent of personnel in MGs I. Just the reverse occurred in the journeyman pay grades (E4 to E6) where percentages increased -- and some, substantially as in the case of E4s -- for both MG I and MG II. Apprentices (E1-E3) showed the most irregular pattern in contrasting FYs 64-65 with FYs 74-75, with the percent of E3s in MGs I and II improving in the later bi-annual period, while the percent of E2s and E1s in MG I decreased, and in MG II remained even (E2s) or went up-and-down (E1s).

The examination of the FYs 72-75 period revealed some slightly different patterns than were seen in the FYs 64-75 v. FYs 74-75 analysis. The main differences were:

(1) Although the supervisory pay grades generally experienced losses in MGs I and II in comparing the one bi-annual period with the other, since FY 72 there have been slight improvements for E7 and E9 personnel, particularly in MG II.

(2) Although MGs I and II percentages for the journeyman pay grades were much higher in FYs 74-75 as compared to FYs 64-65, upper mental group percentages remained about the same from year to year during the FYs 1972-75 period.

(3) Although E3s improved upon their FYs 64-65 MG I and II percentages in FYs 74-75, the trend in these upper mental group categories for that pay grade since FY 72 has been downward. E2s, consistent with the

FYs 64-65 v. FYs 74-75 contrast, have tended to lose percentage points in MGs I and II since FY 72. The E1 percentages have fluctuated, sometimes sharply, since FY 72.

In general, it can be said that upper MG distributions for total petty officers have at least improved over those of ten years ago. While there are considerable differences by pay grades, the supervisory pay grades generally seem to show a slight improvement, and the journeyman pay grades have leveled off at a significantly higher percent of MGs I and II personnel than was true a decade ago. Mental group distributions for apprentices, similar to the manning picture for E1-E3, reflect some irregularities. However, the one consistent pattern is that apprentices have continued over the years to be quite a bit lower than petty officers in the percent of personnel in MGs I and II.

High School Graduates (Table 13)

Schooling information by pay grades is virtually unavailable in practical printed format at this time. Consequently, the only such information which presently can be provided was computed from numbers reported in the NEOCS study* (1973). Though only for FY 65 and FY 73, the percentages in Table 13 show one important change: the difference in percent of high school graduates for petty officers and non-petty officers that existed in FY 65 (59.8% v. 78.4%) had all but disappeared by FY 73.

The only opportunity in this preliminary analysis for contrasting schooling and aptitude (Tables 12 and 13) was for FY 65 and FY 73. However, such an across-the-board comparison was not possible for those two

* Navy Enlisted Occupational Classification System (NEOCS) Study

years because schooling percentages are reported only for pay grade clusters in most cases rather than by individual pay grades. Nevertheless, there are some indications as follows that aptitude and schooling were not closely correlated:

(1) Although the percent of high school graduates for the supervisory pay grades (E7-E9) rose from 57.6 to 88.9, the percent of personnel in MGs I and II actually fell off for each supervisory pay grade in comparing FY 65 with FY 73.

(2) With E4s, the only single pay grade for which information on both aptitude and schooling is reported, the increase in high school graduates (66.9% v. 90.2%) was more substantial than the overall increase in MG I and II percentages (51.5% v. 68.1%).

(3) While total petty officer high school graduates jumped thirty percentage points, those in MGs I and II went up less than nine percentage points.

RATINGS

The availability of mental group information by ratings for FY's 64, 65, 72, 73, 74, and 75, as well as high school graduate percentages for FY 65 and FY 73, again made it possible to explore, in a limited way, a relationship between schooling and aptitude. Additionally, certain comparisons could be made with existing strength and requirement figures by ratings for the same years.

Strengths/Requirements (Table 14)

Strength and requirement figures were examined for petty officers (E4-E9) for the eighty main rating groups. It was not possible to split

AB's, AD's, AM's, AS's, CT's, ET's, FT's, GM's, and ST's into their sub-ratings for the years prior to 1974, which, if it had been done, would have produced approximately 103 distinct ratings. For example, normally CT's can be divided into CTT, CTA, CTM, CTO, CTR, and CTI sub-ratings. The final report will contain figures for the 103 distinct ratings. See Appendix E for a description of each rating abbreviation listed in Table 14, as well as for the sub-ratings not listed.

As with the CREO categories used to examine pay grade requirements and strengths, a similar set of CREO groups was selected as appropriate criteria for examining requirements and strengths by ratings. The groups, A through E, reflect specific conditions of career manning within individual ratings, ranging from extremely short to excessively overmanned, as follows:

(1) Group A - Rating career manning is less than 75 percent; extreme shortage of career strength relative to career requirements.

(2) Group B - Rating career manning is between 75 and 89 percent; shortage of career strength relative to career requirements.

(3) Group C - Rating career manning is approximately correct (90-105%); management is designed to stabilize at present levels.

(4) Group D - Rating career manning is in excess of 105 percent. First-term reenlistments need not be directly controlled, but to reduce overmanning, other actions may be employed, e.g., conversion programs, non-continuation, etc.

(5) Group E - Rating career manning is in excess of 105 percent; ratings are under direct control of CHNAVPERS. CHNAVPERS

approval is required for all first-time reenlistments or extensions to initial enlistment, including extensionts on active duty for Naval Reservists. Subsequent reenlistments may require CHNAVPERS approval. CHNAVPERS approval for continuation on active duty beyond 21 years may be required on a case basis. Applicable notes on Open/Closed Rating /Rate Lists apply.

As Table 14 shows, almost half (38) of the 80 main ratings reported fitted into either CREO Group A or B in FY 75. However, only 8 were manned at the Group A, "extreme shortage," level. Virtually the entire Deck, Ordnance, and Precision Equipment occupation groups are at the A/B manning level, with a large number of ratings from the Administration, Engineering & Hull, and Aviation occupation groups also experiencing significant shortages. While some ratings have been consistently undermanned over the years (i.e., BM, EW, MA, OS, OT, QM, SM, IM, OM, LN, NC, SH, BR, BT, HT, IC, MR, CU, SW, AC, AO, AV, AW, and AX), others (FT, GM, MN, TM, CT, RM, LI, ML, AB, AE, AF, PH, PT, and TD) either reflect a recent undermanned phenomenon or have fluctuated, mostly worsening, over the years reported. Of the eight ratings which were extremely short of personnel (Group A) in FY 75, six of these (MA, OT, SM, GM, NC, and BR) have had a declining trend for several years, while EW's have at least shown an upward trend. PTs, something of an aberration, dropped from 99% to 42% of requirements between FY 74 and FY 75. About half of the ratings which are short on manpower call for personnel with highly technical operator and maintenance skills. These ratings are: AC, AE, AF, AO, AV, AW, AX, BT, BR, CT, FT, GM, HT, IC, MN, MR, and RM.

Aptitude (Tables 15, 16, and 17)

Two kinds of schooling/aptitude information were obtained for ratings and occupation groups: (1) Percent of high school graduates for FY 65 and FY 73, and (2) Percent falling into mental groups I, II, and upper III for FY's 64, 65, 72, 73, 74, and 75. The categories of mental groups investigated classify high-aptitude personnel from GAM (GCT + ARI + MECH) scores on the Basic Test Battery, and in aggregate represent the range within which a sailor must fall to be eligible to attend a Navy school. By definition, those who fall into MGs I, II, and upper III are called "school eligibles". See appendices F and G for more information on general and specific school eligibility requirements.

Table 15 contains the percent of "school eligibles," in addition to percentages for MGs I, II, and upper III, by individual ratings and occupation groups for fiscal years 64, 65, 72, 73, 74, and 75.

In total, the enlisted ratings have experienced an increase in the proportion of personnel classified in the upper mental groups range since the close of the Vietnam War as compared with before. Whereas about 74% of personnel assigned to a rating in 1964-65 were "school eligible," about 80% were so qualified during the 1972-75 period.

In examining MGs by individual ratings, one notices that there seems to be no real difference between those ratings which are short of personnel and those which meet or exceed manning requirements as reported in Table 14. A comparison of "school eligible" percentages for FY 75 for the two categories or ratings illustrates this point in Table 16.

On the surface, it appears that personnel shortages among ratings have not been accompanied by any lowering of quality standards as defined

by the MG distributions of incumbent personnel. If this were not the case, an inevitable skewing toward lower MG categories would result among these rating, presumably in an effort to improve quantity.

As a further check on the validity of the contention that quality is not being sacrificed for quantity, an examination was made of MG figures for those undermanned ratings previously identified as calling for personnel with highly technical operator and maintenance skills. The skill level of these highly specialized ratings virtually mandates that manning be in accord with high aptitude standards, and, therefore, such ratings would serve as a more appropriate group for examing the quality v. quantity question. Table 17 was constructed for that purpose.

The figures of Table 17 generally support a conclusion that undermanned technical ratings have held the line on that dimension of quality defined by the MG levels of personnel. Furthermore, as previously noted, there seems to be no distinct differences by mental group categories between undermanned ratings generally and other ratings.

The vast majority of ratings have improved upon, or in a few instances kept the same, MG percentages over the six years reported in Table 15. However, five ratings (DK, PC, AK, AS, AZ) dropped rather sharply (minus 10 percentage points or better) either since FY 64 or in recent years, while four other ratings (BL, PM, CM, and EO) dropped only slightly. On the other hand, seven ratings (GM, TM, AD, HT, HT, ML, and MM), the latter four of which being from the Engineering & Hull occupation group, rose sharply (plus 10 percentage points or better), underscoring an increase in technical competency requirements which have developed in the last ten years for personnel in these ratings.

Nevertheless, one in four personnel in twenty-one of the ratings reported in Table 15 was in MGs lower III and IV in FY 75. That is to say, those ratings were below 75% in the percent of school eligibles. They were: BM, SM, DK, MS, SH, SK, LI, BR, BT, EN, HT, PM, BU, CM, EO, SW, UT, AB, AK, AM, and AS. Despite the rise in MG percentages for certain Engineering & Hull ratings, half (BR, BT, EN, HT, PM) of the ten ratings in this occupation group, including two ratings (BT and HT) which have shown significant MG increases, are at the 75% level or less of school eligibility. Two other ratings (MR and ML) from that occupation group are but one percentage point removed from the 75% index.

High School Graduates (Table 18)

A comparison of FY 65 with FY 73 for percent of high school graduates illustrates that the increase in personnel with at least a secondary school education has been substantial. Table 18 shows that virtually every rating increased by no less than ten percentage points (FY 65 v. FY 73) in the percent of high school graduates. Only the FT and DS ratings, already relatively high in FY 65 for percent of secondary school graduates, made less than this minimal gain in FY 73. Nine of ten sailors assigned to a rating in FY 73, as compared to six of ten in FY 65, had a high school certificate.

The greatest change in percentage occurred in the Deck, Ordnance, Administrative, Engineering & Hull, Construction, and Aviation occupation groups. Some ratings (BM, QM, SM; GM, MN, TM; IM, CS, PC, SD, SH; BR, BT, EN, HT, ML, MM, MR; CM, CU, EO, UT; AB, AD, AM, AO, PR) increased more than the average change in percentage points of +29.3 for FY 73, ranging from 30 to more than 50 percentage points. The greatest increases

occurred in the Engineering and Hull occupation group where seven of ten ratings exceeded the average FY 73 change in percentage points.

Looking at the data in Table 18 in a more absolute and less relative way, one finds in FY 73, that in two thirds of the ratings at least 90% of the personnel were high school graduates. Those ratings which were below the 90% mark were in the Deck (BM, SM), Ordnance (FT, GM), Administrative (CS, SD, SH, SK), Engineering & Hull (BR, BT, EN, HT, ML), Construction (BU, CM, EO, SW, UT), and Aviation (AB, AO, AS, PR) occupation groups.

Two final points are made with respect to the examination of personnel characteristics by ratings. First, an examination of the percent change in school eligibles (Table 15) between FY 65 and FY 73 for those ratings already identified as having had above average increases in percentage points for high school graduates (also FY 65 v. FY 73) shows that the generally substantial increase in high school graduate percentage points among these ratings is not matched by the same substantial increase in upper mental group percentages. Indeed, the percent of school eligibles usually improves, and in a few of these ratings markedly, but overall school eligibles do not seem to keep pace percentagewise with high school graduates. It should be stated, however, that this observation is based on a somewhat cursory analysis of mental group and high school graduate figures, but this tentative conclusion is, nevertheless, consistent with other comparisons contained in this report regarding aptitude and schooling.

The second point is that, similar to the conclusion reached from an earlier analysis of the MG/school-eligible data, the increases in

percent of high school graduates in ratings with severe personnel shortages show that quality, as defined by a schooling criterion, has not suffered.

III. CONCLUSIONS AND IMPLICATIONS

The preliminary analysis of Navy enlisted personnel characteristics resulted in a number of tentative conclusions which are of interest to the Navy Technical Information Presentation Program. A description of each of these, as well as any related implications, follows:

Sex and Race

Conclusion: Increases in the number and percent of females and non-Whites (especially Blacks) among the total Navy enlisted personnel have been significant in recent years, although males (24-to-1) and Whites (9-to-1) are still in a strong majority position with respect to their counterparts.

Implication: No special implication is noted or implied. Any trend in sexual and racial composition should be examined for its impact on individual ratings like any other standard variable. Sex and race factors seem relevant to NTIPP only to the extent that they clearly differentiate personnel by potential and skills within ratings. Any differences by sex and race, with respect to "potential" (e.g., aptitude, years-of-education) are being investigated for the final report.

Years-of-Education v. Aptitude

Conclusion: Levels of civilian education have risen substantially for enlisted personnel in recent years. These increases apply to total enlisted, to recruits, and to pay grade and rating groups.

On the other hand, aptitude as defined by individual BTB sub-tests and by mental groups, has not kept pace with years-of-education. There

has been no discernible increase (pre-Vietnam v. post-Vietnam) in average scores on GCT, ARI, and MECH for recruits, and the distribution of rated personnel by mental groups, while improved overall, still seems to lag behind schooling increases.

Implication: Years-of-education is not necessarily indicative of potential. More exactly in this case, there is insufficient evidence that civilian schooling is a highly reliable index of intellectual ability and achievement among enlisted personnel. However, the entire question of schooling and aptitude must be examined in much greater detail, especially with respect to individual ratings.

The answer to the schooling-aptitude question is of obvious importance to NTIPP. The preparation of training and documentation materials must coincide with the most reliable and valid indicators of the ability of each discrete classification of personnel to comprehend and use those materials.

Reading

Conclusion: Information on reading skills among total enlisted personnel does not exist, and that on accessions is sparse. However, available findings from studies of reading skills for recruits and the readability of certain training materials suggest the existence of a substantial mismatch between the reading skills of a significant portion of enlisted personnel and what they have to read.

Implication: The findings on reading skills are further evidence that years-of-education is not necessarily indicative of ability and

achievement. Seventy-five percent of personnel recruited during FY 75 were at least high school graduates, but half of the recruits tested during that same year read below a 10.7 RGL!

Again, the implication for NTIPP is apparent. It is particularly important to obtain accurate information concerning the reading skills of personnel by ratings and the readability of materials required for job task performance. Readability, in this instance, refers not merely to the printed narrative of technical manuals, but, more importantly, to graphics/words combinations.

MANNING: Quality and Quantity by Pay Grades

Conclusion: A significant trend exists of undermanning at the E3 and E5 levels, and overmanning at the E2 level.

Implication: The implication of this conclusion is not immediately clear, but it is important to obtain greater clarification of its meaning. On the one hand, a possible explanation for the trends that were found is that declining interest in advancing, decreasing capacity to advance (Recall, for example, Curran's observation about the readability of the manual Basic Military Requirements), or both has/have caused an oversupply of E2s and undersupply of E3s, with such interest-capacity characteristics negatively affecting reenlistments, which in turn hold proportionate consequences for E5 manning. On the other hand, a more conservative explanation is that an irregular personnel manning patterns is inevitable during periods of substantial increases or cut-backs of total personnel, and that the organization will eventually, and no doubt

automatically, assume its desired shape when total manning finally achieves some degree of year-to-year consistency.

A more thorough analysis of manning trends by pay grades must include an examination of reenlistments by aptitude levels for E1 - E3 personnel. Only then will it be possible to determine more exactly whether the trends reported are the result of "capacity-interest" factors or simply the normal "stretch-shrink" resiliency of an organizational structure adapting to change.

The answer to the above question is of the utmost importance to NTIPP for any necessary predictions and extrapolations about the quantity and quality of apprentices who are likely to move into journeyman pay grades in the future.

MANNING: Quality and Quantity by Ratings

Conclusion: Although significant manning shortages exist in almost half of the enlisted ratings, including extreme shortages in about one-in-ten ratings, quality, as defined by the aptitude and schooling of personnel by ratings, has not been generally affected. That is to say, manning level as a variable does not seem to discriminate by degrees of quality (as defined above) among ratings.

Implication: The Navy seems to be "holding the line" on quality standards, even where quantity is a problem. However the quality-quantity interface must be watched closely and analyzed in much greater detail than has been done in this preliminary analysis. Futhermore, any moves to improve manning levels significantly would make a quality trade-off very likely. Such a trade-off in the technical ratings could increase

the probability of reducing the percent of petty officers with satisfactory skills for comprehending technical materials.

Conclusion: Many technical ratings have personnel shortages, less-than-average aptitude/schooling percentages, and/or increasing or special skill requirements. Some ratings, especially in the Engineering & Hull occupation group, appear to be vulnerable on all three counts.

Implications: Any quality-quantity trade-off, as previously indicated, impacts directly on the preparation of technical materials. However, those with increasing ratings requirements for technical skills present an additional problem, particularly in the case of personnel who were admitted to the rating by less stringent criteria than those being applied presently. Again, each rating has to be looked at carefully for evidence of problems in one or more of the three areas mentioned above.

IV

TABLES

TABLE 1

Total Strength
Active Duty Enlisted Personnel
1960 - 75

At End of Fiscal Year	Strength
1960	544,040
1961	551,603
1962	584,071
1963	583,596
1964	584,700
1965	587,183
1966	658,635
1967	663,831
1968	673,610
1969	684,145
1970	605,899
1971	542,298
1972	510,669
1973	490,009
1974	474,736
1975	465,522

TABLE 2

Sex Distribution
Active Duty Enlisted Personnel
1963 - 1975

At End of Fiscal Year	Strength	% Male	% Female
1963	583,596	99.1	0.9
1964	584,700	99.2	0.8
1965	587,183	99.2	0.8
1966	658,635	99.2	0.8
1967	663,831	99.2	0.8
1968	673,610	99.2	0.8
1969	684,145	99.2	0.8
1970	605,899	99.1	0.9
1971	542,298	98.0	2.0
1972	510,669	98.9	1.1
1973	490,009	98.2	1.8
1974	474,736	97.2	2.8
1975	465,522	96.3	3.7

TABLE 3

Age Distribution
Active Duty Enlisted Personnel
1960 - 75

At End of Fiscal Year	Strength	Under 20	20	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Over 60
1960	544,040	19.3%	13.5%	29.5%	12.1%	11.6%	9.9%	3.1%	0.8%	0.2%	*	*
1961	551,603	19.6	13.2	30.1	12.5	10.9	9.7	3.0	0.8	0.2	*	*
1962	584,071	18.3	14.6	30.8	13.3	9.8	9.3	3.0	0.8	0.2	*	*
1963	583,596	15.4	14.2	33.2	14.6	9.5	9.0	3.0	0.8	0.2	*	*
1964	584,700	14.8	12.3	35.1	15.5	9.4	8.7	3.2	0.8	0.2	*	*
1965	587,183	16.8	10.6	34.1	16.2	9.1	8.6	3.4	0.8	0.2	*	*
1966	658,635	14.6	16.0	34.2	14.9	8.6	7.3	3.3	0.9	0.2	*	*
1967	663,831	9.2	16.8	38.9	14.9	9.5	6.5	3.0	0.9	0.2	*	*
1968	673,610	7.7	14.8	41.0	14.0	9.8	5.8	2.6	0.9	0.2	*	*
1969	684,145	8.6	13.6	43.8	13.0	9.0	5.5	2.3	0.9	0.2	*	*
1970	605,899	8.9	12.0	45.5	13.0	10.4	6.9	2.4	1.0	0.2	*	*
1971	542,298	8.8	9.9	43.8	14.5	11.4	8.0	2.4	1.0	0.2	*	*
1972	510,669	10.9	10.0	39.4	15.3	11.4	9.2	2.6	1.0	0.2	*	*
1973	490,009	13.0	11.1	35.2	15.5	11.1	10.3	2.8	1.0	0.2	*	*
1974	474,736	19.8	11.7	30.8	14.2	10.4	9.4	2.6	0.8	0.2	*	*
1975	465,522	19.8	11.0	31.1	15.1	10.5	9.0	2.5	0.8	0.2	*	*

*Less than 1/50 of 1%

TABLE 4

Enlisted Strength
by Race
FY 1962 - 1975

Year*	Strength	White	%	Black	%	Other	%
1962	584,071	537,382	92.01	30,210	05.17	16,479	02.82
1963	583,596	535,260	91.72	31,428	05.38	16,908	02.90
1964	584,700	533,954	91.32	33,028	05.65	17,718	03.03
1965	587,183	533,426	90.85	34,848	05.93	18,909	03.22
1966	658,635	603,156	91.58	35,487	05.39	19,992	03.03
1967	663,831	609,738	91.85	32,799	04.94	21,294	03.21
1968	673,610	618,618	91.84	31,820	04.72	23,172	03.44
1969	684,145	623,241	91.10	36,394	05.32	24,510	03.58
1970	605,899	547,911	90.43	33,831	05.58	24,157	03.99
1971	542,298	489,296	90.23	29,393	05.42	23,609	04.35
1972	510,669	454,580	89.02	32,485	06.36	23,604	04.62
1973	490,009	427,748	87.29	37,569	07.67	24,692	05.04
1974	474,736	410,146	86.39	39,905	08.41	24,685	05.20
1975	465,522	402,399	86.44	37,246	08.00	25,877	05.56

*at the end of FY

TABLE 5

Petty Officers v. Non-Petty Officers
by Race
1968 and 1972*

1968

Race	% Petty Officers	%Non-Petty Officers	%Total Enlisted
White	91.9	90.5	91.3
Black	4.8	5.3	5.0
Other	3.3	4.2	3.7
Total	100.0	100.0	100.0

1972

Race	% Petty Officers	%Non-Petty Officers	%Total Enlisted
White	89.5	85.4	87.9
Black	5.0	10.9	7.3
Other	5.5	3.7	4.8
Total	100.0	100.0	100.0

*years represent calendar years.

TABLE 6

Years-of-Education Distribution
Active Duty Enlisted Personnel
1960 - 75

At end of Fiscal Year	Strength	Less than High School Graduation	High School Graduation Only	Some College (less than 4 years)	Bachelor or Higher Degree	Total High School Graduates	Unknown
1960	544,040	47.7%	42.7%	3.8%	0.3%	46.8%	5.5%
1961	551,603	47.5	46.6	4.2	0.5	51.2	1.4
1962	584,071	47.5	47.3	4.8	0.4	52.5	-
1963	583,596	45.5	48.6	5.4	0.5	49.7	-
1964	584,700	42.9	50.5	6.2	0.4	57.1	-
1965	587,183	42.0	51.1	6.5	0.4	58.1	-
1966	658,635	24.1	65.4	9.9	0.6	75.9	-
1967	663,831	18.6	67.9	12.6	0.9	81.4	-
1968	673,610	14.6	69.1	15.0	1.3	85.4	-
1969	684,145	13.7	69.6	15.0	1.7	86.2	-
1970	605,899	13.8	69.3	14.8	2.1	86.2	-
1971	542,298	12.9	70.1	14.7	2.3	87.1	-
1972	510,669	12.7	71.5	13.6	2.2	87.3	-
1973	490,009	14.8	71.3	12.1	1.7	85.2	-
1974	474,736	15.4	72.4	11.0	1.2	84.6	-
1975	465,522	15.1	73.0	10.8	1.1	84.9	-

TABLE 7

Mental Group Distibutions
Active Duty Enlisted Personnel
1964 - 75

At end of Fiscal Year	Strength	Mental Group Categories			
		I %	II %	III %	IV %
1964	584,700	6.2	41.2	38.7	13.8
1965	587,183	6.5	41.5	38.5	13.6
1966	658,635	6.6	41.4	38.1	13.9
1967	663,831	7.6	43.9	36.2	12.4
1968	673,610	8.5	46.5	33.7	11.4
1969	684,145	9.0	47.8	31.6	11.6
1970	605,899	9.5	48.6	31.2	10.7
1971	542,298	9.8	49.1	30.9	10.2
1972	510,669	9.9	49.4	31.0	9.8
1973	490,009	9.3	47.1	32.1	11.5
1974	474,736	8.9	46.8	32.9	11.5
1975	465,522	8.6	47.6	33.6	10.2

TABLE 8

Basic Test Battery
Average Scores Among
Enlisted Accessions
FY 1960 - 75

Fiscal Year	Strength	GCT	ARI	Mech
1962	92,324	52.3	51.7	51.0
1963	75,521	52.4	52.6	51.2
1964	87,487	51.9	52.2	50.8
1965	88,650	51.4	52.1	50.0
1966	142,532	54.2	54.1	51.6
1967	94,871	57.0	55.1	52.1
1968	108,252	55.0	54.2	51.5
1969	124,656	53.8	53.2	50.5
1970	117,110	54.6	53.6	50.8
1971	80,494	55.6	53.9	51.0
1972	79,306	54.2	51.9	52.7
1973	102,494	52.7	50.4	52.2
1974	84,763	51.7	49.1	49.5
1975	100,600	52.9	50.6	50.7

TABLE 9

Percent of High School Graduates
Among Enlisted Accessions
FY 1962 - 75

Year	Percent
1962	60.7
1963	63.2
1964	58.3
1965	56.0
1966	76.8
1967	89.2
1968	86.8
1969	82.4
1970	82.0
1971	82.7
1972	81.5
1973	69.9
1974	72.2
1975	74.9

TABLE 10

Mental Group Distribution
Recruit Inputs
1960 - 1975

Fiscal Year	Number of* Accessions	Mental Groups			
		I	II	III	IV
1960	85,936	7.5%	29.4%	56.5%	6.6%
1961	88,102	5.6	34.6	50.3	9.4
1962	102,565	5.4	34.2	48.9	11.5
1963	79,712	6.3	36.8	52.1	4.9
1964	88,651	6.1	34.9	48.4	10.6
1965	87,249	5.1	32.3	48.9	14.1
1966	136,557	7.9	42.0	44.9	5.2
1967	94,411	9.8	51.0	28.0	11.2
1968	115,187	8.8	51.0	23.6	13.4
1969	140,583	7.0	40.7	33.1	19.2
1970	96,226	6.1	38.6	38.9	16.4
1971	75,514	6.1	39.6	40.2	14.0
1972	85,201	4.5	32.4	42.5	20.2
1973	91,690	3.6	31.4	49.7	15.3
1974	73,268	2.4	33.0	61.0	3.6
1975	77,598	3.1	34.6	57.0	5.3

* Accession figures differ from those in Table 8 because these are based only on USN, Male, Non-prior service figures from the Navy Recruiting Command, while Table 8 figures are totals developed from BUPERS monthly reports.

TABLE II

Strength v. Requirements
Inlisted Pay Grades
FY 1964, 65, 72, 73, 74, and 75

Pay Grade	FY 1964 Strngth	Req'mnt	%	FY 1965 Strngth	Req'mnt	%	FY 1972 Strngth	Req'mnt	%	FY 1973 Strngth	Req'mnt	%	FY 1974 Strngth	Req'mnt	%	FY 1975 Strngth	Req'mnt	%
E9	2,904	3,344	86.8	2,780	3,307	84.1	3,654	4,098	89.2	3,702	4,318	85.7	3,768	4,283	88.0	3,556	4,008	88.7
E8	7,424	7,602	97.7	7,637	8,436	90.5	9,183	9,641	95.2	9,001	10,051	89.6	8,800	10,173	86.5	8,210	9,694	84.7
E7	38,151	39,536	96.5	35,669	39,049	91.3	36,863	37,168	99.2	35,244	36,026	97.8	33,740	34,160	98.8	31,728	32,190	98.6
E6	68,421	82,995	82.4	68,733	81,998	83.8	73,515	76,468	38.8	71,913	76,524	94.0	66,370	73,855	89.9	65,929	72,260	91.2
E5	88,129	104,244	84.5	92,759	104,873	88.4	88,528	98,086	90.1	85,059	96,839	87.8	80,577	92,496	87.1	79,368	90,499	87.7
E4	111,812	125,172	89.3	116,556	123,565	94.3	105,459	111,829	94.3	97,573	108,549	89.9	92,044	99,506	92.5	93,262	97,395	95.8
Petty Officer Total	316,841	362,893	87.3	324,134	361,228	89.7	319,002	337,290	94.6	302,492	332,307	91.0	285,299	314,473	90.7	282,053	306,046	92.2
E3	150,986	142,921	105.6	154,986	143,857	107.7	114,717	120,270	95.4	74,744	114,568	65.2	82,265	106,950	76.9	80,862	107,538	75.2
E2	95,489	65,012	146.9	84,420	70,690	119.4	50,183	46,254	108.5	80,007	38,619	207.2	72,803	35,367	205.9	72,715	31,671	229.6
E1	21,384	21,476	99.6	23,643	21,393	110.5	26,767	16,669	160.6	32,766	12,348	265.4	34,369	17,932	191.7	29,892	20,271	147.5
E1 - E3 Total	267,859	229,409	116.8	263,049	235,940	111.5	191,667	183,192	104.6	187,517	165,535	113.3	189,437	160,249	118.2	183,469	159,480	115.0
Grand Total	584,700	592,302	98.7	587,183	597,168	98.3	510,669	520,483	98.1	490,009	497,842	98.4	474,736	474,722	100.0	465,522	467,526	100.0

TABLE 12

Mental Group Distributions
Pay Grades
FY 1964, 65, 72, 73, 74, and 75

Pay Grade	1964				1965				1972				1973				1974				1975			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
E9	28.7	54.7	15.4	1.2	29.0	54.6	15.2	1.2	17.6	58.6	21.5	2.4	15.9	57.9	23.6	2.6	14.3	57.6	25.1	3.0	13.1	59.1	24.5	3.3
E8	16.7	56.3	24.7	2.4	16.8	56.4	24.4	2.4	11.4	57.9	26.3	4.4	11.1	57.9	26.5	4.5	10.9	56.5	27.8	4.8	11.1	55.7	28.1	5.1
E7	9.7	52.2	32.9	5.1	9.5	52.2	33.1	5.2	7.3	49.7	34.8	9.2	7.0	48.4	35.1	9.6	7.5	49.4	33.8	9.3	7.9	50.2	33.4	8.5
E6	6.6	44.8	37.8	10.8	6.8	45.2	37.3	10.7	7.6	44.0	35.8	12.6	7.4	44.5	35.0	12.7	8.5	45.7	34.0	11.8	9.1	46.9	32.9	11.1
E5	7.0	42.5	35.3	15.1	7.2	42.3	35.1	15.2	15.9	51.3	23.2	9.6	14.7	50.7	24.6	10.0	13.7	50.9	25.3	10.1	12.9	52.0	25.5	9.6
E4	6.5	44.8	35.7	12.9	6.7	44.8	36.2	12.3	12.5	57.1	24.9	5.7	12.6	53.5	25.7	6.2	13.2	55.7	24.5	6.7	12.4	55.5	25.0	7.1
Petty Off. SubTotal	7.5	45.5	35.3	11.7	7.7	45.5	35.3	11.6	11.6	51.5	28.2	8.7	11.3	50.7	28.8	9.1	11.5	51.3	28.2	9.0	11.2	52.0	28.0	8.7
E3	4.3	36.3	43.4	16.4	4.8	35.1	43.2	16.9	8.9	48.5	32.9	9.7	8.9	48.1	32.1	10.8	6.6	43.1	35.8	14.5	6.5	45.5	36.4	11.5
E2	4.6	34.3	44.2	17.2	5.0	37.4	42.2	15.5	3.7	39.4	41.4	15.5	3.8	36.1	41.8	18.3	3.6	39.1	42.7	14.5	3.0	35.2	47.2	14.6
E1	5.0	34.	44.9	16.5	3.7	32.0	46.1	18.3	3.7	37.5	40.5	18.3	3.0	33.3	42.9	20.8	1.9	28.2	48.2	21.7	3.3	42.6	45.3	8.8

TABLE 13

Percent of High School Graduates
By Pay Grades

FY 65 v. FY 73

Pay Grade	Percent of H.S. Graduates		1965 v. 1973 Change in Percentage Pts.
	1965	1973	
E7 - E9	57.6	88.9	+31.3
E5 - E6	55.3	88.0	+32.7
E4	66.9	94.5	+27.6
Petty Officers Total	59.8	90.2	+30.4
E1 - E3	78.4	90.8	+12.4
Grand Total	63.2	90.8	+27.6

TABLE 14

Strength v. Requirements
Ratings and Navy Occupation Groups
(Petty Officers)
FYs 1964, 65, 72, 73, 74 and 75

Rating	1964 Strength	%	1965 Strength	%	1972 Strength	%	1973 Strength	%	1974 Strength	%	1975 Strength	%
BM	12,236	88	12,234	89	10,790	88	9,341	86	8,813	88	8,258	88
EW	-	-	-	-	792	44	1,024	50	1,242	65	1,340	71
MA	-	-	-	-	-	-	-	-	437	76	530	69
OS	7,707	85	7,611	84	6,337	83	5,379	80	4,782	78	4,717	76
OT	-	-	-	-	738	73	858	87	800	73	838	71
QM	4,347	77	4,493	84	3,831	78	3,505	77	3,294	85	3,188	87
SM	3,982	82	3,933	84	3,278	88	2,753	85	2,250	77	2,031	70
ST	4,149	76	4,570	82	5,793	99	5,484	97	5,317	96	5,136	94
Deck Total	32,421	83	32,841	85	31,559	85	28,344	83	26,935	84	26,038	33
FT	6,521	92	7,775	104	8,268	100	7,868	96	7,136	92	6,730	89
GM	8,459	89	8,570	90	7,581	91	6,435	81	5,629	76	5,283	73
MN	562	105	520	102	433	82	437	83	410	83	392	77
MT	1,864	/8	1,379	95	1,379	99	1,368	100	1,208	103	1,272	97
TM	4,052	81	4,372	93	3,951	90	3,745	89	3,423	84	3,179	84
Ordnance Total	21,458	87	22,616	96	21,612	94	19,853	89	17,806	85	16,856	83
DS	506	92	785	108	1,615	85	1,698	103	1,686	107	1,779	109
ET	12,185	80	13,049	85	19,962	117	19,396	111	17,337	112	16,354	109
Electrnics Total	12,691	81	13,834	86	21,577	114	21,094	111	19,023	112	18,133	109
IM	297	88	323	94	314	75	339	80	347	83	344	88
OM	326	89	302	83	282	91	274	91	264	82	246	78
PI	-	-	-	-	8	73	7	64	8	80	12	133
Prec. Equip Total	623	89	625	88	604	82	620	85	619	83	602	84

Strength v. Requirements (cont'd)

Rating	1964 Strength	%	1965 Strength	%	1972 Strength	%	1973 Strength	%	1974 Strength	%	1975 Strength	%
CS	10,271	87	10,110	87	8,341	89	7,350	83	6,546	75	-	-
CT	6,384	74	7,220	77	10,076	107	9,365	108	7,754	95	6,970	87
DK	2,140	89	2,181	93	1,990	99	1,960	97	1,933	101	1,941	100
DP	1,538	102	1,755	90	2,519	98	2,668	98	2,783	118	2,642	115
IS	-	-	-	-	-	-	-	-	-	-	349	-
JO	523	84	546	91	466	84	447	80	552	92	686	109
LN	-	-	-	-	-	-	270	63	292	59	357	86
MS	-	-	-	-	-	-	-	-	-	-	12,569	92
NC	-	-	-	-	-	-	-	-	672	74	366	70
PC	985	103	1,106	86	1,039	101	918	87	1,026	110	999	106
PN	5,971	90	5,935	87	5,888	89	6,092	93	5,981	105	5,901	102
RM	15,893	82	15,675	95	15,614	95	15,759	95	13,118	86	12,313	86
SD	6,253	97	6,280	97	7,179	125	6,964	128	6,513	132	-	-
SH	4,617	92	4,605	91	4,046	88	3,479	80	3,287	77	3,424	82
SK	9,505	87	9,671	88	9,402	95	8,054	85	7,510	85	7,755	93
YN	12,969	84	12,924	71	12,319	90	10,708	89	9,950	95	9,776	95
Administration Total	77,049	86	78,008	86	78,879	96	74,034	94	67,245	93	52,764	92
DM	535	88	589	97	378	87	429	97	445	125	424	118
LI	396	88	442	93	403	98	386	91	339	88	369	88
MU	1,161	90	1,149	93	994	73	1,102	81	1,010	87	980	109
Miscellaneous Total	2,092	89	2,180	94	1,775	81	1,917	86	1,794	94	1,773	106
BR	304	48	307	49	192	79	180	71	160	54	134	47
BT	10,602	85	10,562	89	8,053	78	7,499	74	7,001	73	6,969	76
EM	12,837	87	13,636	95	10,930	94	10,732	90	10,242	89	10,286	95
EN	11,358	89	11,496	91	8,121	87	7,235	87	6,785	95	6,541	104

Strength v. Requirements (cont'd)

Rating	1964 Strength	%	1965 Strength	%	1972 Strength	%	1973 Strength	%	1974 Strength	%	1975 Strength	%
HT	10,293	87	10,180	87	8,804	86	7,738	73	7,110	70	7,533	80
IC	5,025	88	5,534	98	4,638	91	4,183	78	4,199	79	4,454	85
ML	213	105	192	96	178	90	168	91	167	85	162	82
MM	17,936	86	19,179	94	17,596	85	19,792	90	19,420	90	19,428	91
MR	2,391	91	2,419	94	2,115	86	1,938	77	1,897	79	1,994	89
PM	132	87	135	90	131	93	138	105	146	99	153	103
Engineering &Hull Total	71,091	87	73,640	92	60,758	86	59,603	83	57,127	84	57,754	89
BU	1,509	88	1,536	92	1,705	72	1,551	71	1,708	79	1,922	94
CE	919	92	971	97	1,141	86	1,040	80	1,127	85	1,185	98
CM	1,011	91	1,047	97	1,231	97	1,100	90	1,100	89	1,126	94
CU	-	-	-	-	36	68	36	68	39	80	40	80
EA	172	91	183	89	269	79	247	74	315	101	352	119
EO	1,639	94	1,587	94	2,070	102	1,735	90	1,643	88	1,606	97
EQ	-	-	-	-	29	94	32	94	33	94	37	98
SW	499	91	512	99	631	83	605	79	628	82	611	84
UT	847	91	840	93	843	72	860	73	915	79	1,013	94
Construc-tion Total	6,596	91	6,676	94	7,955	85	6,206	80	7,508	84	7,892	95
AB	4,097	87	4,480	92	3,819	93	3,627	89	3,575	93	3,473	88
AC	2,774	89	2,626	93	2,177	84	2,292	90	2,224	88	2,148	88
AD	18,587	94	17,553	96	12,863	96	11,916	97	11,319	102	10,697	102
AE	7,741	89	7,812	91	7,463	101	6,718	90	5,931	84	6,148	88
AF	-	-	-	-	367	80	394	90	379	95	327	83
AG	1,872	88	1,924	91	1,414	82	1,429	86	1,430	96	1,432	99
AK	3,217	87	3,339	91	3,083	100	3,303	103	3,440	112	3,144	100
AM	12,093	90	12,430	94	12,378	92	12,155	90	11,782	92	11,298	90

Strength v. Requirements (cont'd)

Rating	1964 Strength	%	1965 Strength	%	1972 Strength	%	1973 Strength	%	1974 Strength	%	1975 Strength	%
AO	5,008	82	5,040	93	5,188	102	4,301	87	3,737	82	3,946	85
AQ	1,913	86	2,320	106	3,365	101	3,253	95	3,345	98	3,453	104
AS	-	-	-	-	1,792	94	1,850	100	1,858	106	1,768	98
AT	11,021	88	11,0401	95	10,330	100	9,388	93	9,079	97	9,338	102
AV	-	-	-	-	279	84	280	82	290	94	255	79
AW	-	-	-	-	2,248	91	2,040	78	1,900	83	2,074	87
AX	1,926	80	2,293	78	901	37	963	86	1,110	75	1,396	88
AZ	464	74	1,134	85	2,314	97	2,677	105	2,753	104	2,618	98
PH	2,344	8?	2,529	93	1,928	90	1,968	97	2,023	117	1,887	112
PR	1,882	90	1,933	95	1,660	95	1,526	93	1,359	88	1,290	85
PT	322	75	362	73	452	100	454	92	446	99	217	42
TD	1,529	90	1,514	90	1,657	103	1,583	103	1,403	97	1,196	81
Aviation Total	76,790	89	78,329	93	75,678	94	72,117	93	69,383	102	68,105	94
HM	14,145	92	13,638	92	16,467	105	15,578	92	14,903	95	16,039	105
Medical Total	14,145	92	13,638	92	16,467	105	15,578	92	14,903	95	16,039	105
DT	1,885	92	1,837	93	2,138	97	2,216	96	2,284	107	2,456	119
Dental Total	1,885	92	1,837	93	2,138	97	2,216	96	2,284	107	2,456	119
Occupations/ Ratings Total	316,841	87	324,224	90	319,002	93	302,582	90	284,627	92	268,412	92

TABLE 15

Mental Group Distributions (School Eligibles: I, II, upper III)
Ratings and Navy Occupation Groups
FYs 1964, 65, 72, 73, 74, and 75

	1964				1965				1972				1973				1974				1975			
Rating	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BM	1.1	18.1	21.7	40.9	1.2	18.0	22.1	41.3	1.1	22.0	23.7	46.8	1.4	21.7	23.4	46.5	1.5	22.6	23.2	47.4	1.7	23.0	22.9	47.6
EW		-		-		-		-	15.2	71.6	11.1	97.9	18.4	69.8	10.0	98.1	21.5	68.2	8.9	98.5	20.1	69.4	8.8	98.3
OS	6.7	65.3	20.4	92.4	7.0	64.5	21.1	92.6	11.6	70.1	13.7	95.4	11.0	71.2	13.4	95.6	10.9	69.4	14.5	94.5	10.3	69.4	14.9	94.6
OT		-		-		-		-	23.3	66.8	8.9	99.0	22.7	68.2	8.2	99.0	23.3	67.4	7.8	98.7	20.3	70.3	7.9	98.5
QM	8.3	43.6	24.4	76.3	8.5	45.0	22.5	76.0	9.8	56.5	19.5	85.8	9.6	55.5	20.4	85.4	9.6	55.0	19.6	84.2	10.4	55.1	19.5	85.0
SM	2.9	35.3	24.7	62.8	2.6	34.3	24.6	61.6	4.4	41.7	25.8	72.0	4.5	52.3	3.3	60.1	3.0	36.5	26.9	66.4	3.3	38.6	26.1	68.0
ST	10.3	73.6	13.5	97.3	10.1	71.6	15.1	96.7	18.9	72.7	7.2	98.8	19.3	72.4	7.1	98.8	20.4	71.6	6.8	98.8	19.5	71.5	7.7	98.7
Deck Average	4.9	43.1	20.9	68.9	5.1	43.3	21.1	69.6	9.1	50.7	17.6	77.4	9.4	51.5	17.0	78.0	9.8	49.8	17.0	76.6	9.5	50.5	17.0	77.1
FT	20.5	70.0	7.5	98.0	22.4	68.7	7.0	98.2	21.2	70.3	7.0	98.5	20.5	70.9	6.9	98.4	22.3	70.0	6.3	98.6	21.3	70.2	7.0	98.5
GM	1.6	20.0	23.3	44.9	1.7	21.9	23.6	47.3	4.7	36.0	21.0	61.7	4.5	35.7	21.4	61.6	4.1	34.1	21.9	60.1	4.2	36.3	22.1	62.7
GMT		-		-		-		-	10.5	57.9	17.6	86.0	8.3	58.1	18.8	85.2	8.3	56.4	19.7	84.4	8.2	56.6	20.4	85.2
MN	5.7	51.6	26.7	84.0	4.3	50.8	27.4	82.6	5.5	56.5	26.3	88.4	5.5	56.5	26.7	88.6	5.8	58.6	25.8	90.1	6.9	57.7	25.2	89.8
MT	31.9	63.4	4.0	99.3	26.8	67.8	4.9	99.5	17.0	77.5	5.0	99.6	16.9	77.3	5.4	99.6	16.9	77.2	5.4	99.5	14.1	76.3	8.0	98.5
TM	4.5	51.0	22.9	78.4	4.3	50.7	23.4	78.5	6.7	63.9	17.4	88.0	6.4	64.2	17.5	88.1	5.9	62.9	18.8	87.7	5.5	64.1	19.3	88.8
Ordnance Average	11.8	48.9	15.9	76.6	12.0	49.8	16.0	77.8	12.4	58.9	14.0	85.3	12.2	59.9	13.9	86.0	13.0	59.1	13.8	85.9	12.5	60.3	14.3	87.1
DS	29.3	65.6	4.6	99.5	29.0	66.9	3.5	99.4	41.0	55.7	2.9	99.7	39.6	56.6	3.4	99.6	36.8	58.8	4.0	99.5	32.6	61.9	4.6	99.1
ET	30.6	64.9	3.8	99.4	31.5	64.0	3.9	99.4	30.0	65.0	4.2	99.2	30.0	65.4	3.9	99.4	29.9	65.7	3.8	99.4	28.9	66.4	4.0	99.3
Electrncs Average	30.6	65.0	3.9	99.4	31.4	64.1	3.8	99.4	30.8	64.4	4.1	99.3	30.8	64.7	3.9	99.4	30.5	65.1	3.8	99.4	29.3	66.0	4.1	99.3

	1964				1965				1972				1973				1974				1975			
Rating	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T
IM	6.5	53.8	21.9	82.2	6.6	52.8	23.6	83.0	7.3	64.2	19.8	91.4	7.7	64.6	18.4	90.7	8.6	65.2	17.2	91.1	10.6	63.1	16.0	89.7
OM	10.2	62.7	16.9	89.8	10.2	59.3	17.7	87.2	13.7	61.8	20.4	95.9	12.0	64.0	18.5	94.5	12.0	64.5	18.8	95.3	8.6	66.1	20.4	95.0
PI		-		-	28.6	28.6	14.3	71.4	37.5	62.5	0.0	100.0	50.0	50.0	0.0	100.0	50.0	33.3	16.7	100.0	33.3	66.7	0.0	100.0
Precis'n Eqpt.Avg.	8.3	58.1	19.5	85.9	8.4	55.5	20.9	84.8	10.5	63.1	19.9	93.5	10.0	64.2	18.3	92.4	10.5	64.6	17.9	93.0	10.2	64.5	17.6	92.2
CS	0.9	16.3	21.0	38.3	0.9	15.9	20.9	37.6	1.3	25.5	22.0	48.7	1.2	24.6	21.1	46.9	0.8	21.1	19.5	41.4		-		-
CT	13.8	68.0	14.8	96.6	15.8	66.6	14.4	96.7	24.2	65.8	8.3	98.3	24.7	65.2	8.4	98.3	24.1	65.4	8.6	98.1	22.5	66.7	9.0	98.1
DK	5.8	43.8	21.0	70.7	6.1	44.9	20.7	71.6	5.2	33.1	21.8	60.1	3.9	31.4	21.9	57.2	4.2	31.0	21.4	56.6	4.9	30.0	21.5	56.4
DP	9.3	62.3	19.4	91.0	8.3	62.7	19.8	90.8	13.5	64.5	16.2	94.2	14.5	64.5	15.2	94.2	14.2	64.2	15.4	93.8	13.6	65.2	14.8	93.6
IS		-		-		-		-		-		-		-		-		-		-	16.6	68.0	11.9	96.6
JO	32.1	53.3	9.7	95.1	30.5	54.4	9.9	94.9	30.6	57.3	7.8	95.7	31.2	56.8	7.7	95.7	31.9	56.3	6.9	95.1	31.6	56.7	7.0	95.2
LN		-		-		-		-		-		-	8.8	55.6	20.9	85.4	7.1	56.9	20.2	84.2	8.5	56.0	20.1	84.5
MS		-		-		-		-		-		-		-		-		-		-	0.6	11.4	12.7	24.6
PC	2.7	39.1	29.3	71.2	2.6	35.0	29.9	67.5	2.6	35.8	27.2	66.1	3.0	33.3	24.9	61.3	3.1	33.4	24.9	61.4	3.6	33.9	23.4	60.8
PN	5.1	44.3	24.7	74.0	5.8	45.9	23.7	75.4	11.4	54.3	17.8	83.5	10.9	55.9	17.5	84.4	10.4	54.1	18.6	83.1	10.0	55.0	18.4	83.4
RM	5.4	56.4	26.0	87.7	5.4	54.2	27.2	86.8	9.8	61.0	21.4	92.3	8.8	60.6	22.5	91.9	7.7	60.5	22.9	91.1	6.8	60.1	23.5	90.4
SD	0.1	2.7	7.8	10.6	0.1	2.9	8.0	11.2	0.2	4.1	7.6	11.9	0.3	4.8	7.9	13.0	0.1	2.0	6.7	8.9		-		-
SH	0.4	11.2	17.2	28.8	0.4	10.7	17.1	28.3	0.7	18.0	19.8	38.5	0.5	16.2	19.3	36.0	0.6	15.6	19.2	35.4	0.5	15.7	18.3	34.5
SK	3.3	35.9	23.4	62.7	3.7	36.7	23.0	63.3	4.5	39.0	21.2	3.3	37.2	21.5	62.0	3.0	33.8	21.6	58.4	3.1	35.0	21.9	60.0	
YN	6.3	50.0	24.0	80.3	6.5	50.2	24.0	80.6	8.7	52.8	22.0	83.5	7.4	52.7	22.3	82.4	7.1	51.6	22.4	81.1	6.5	50.4	22.9	79.8
Admin. Average	4.6	37.9	20.3	62.9	5.1	38.1	20.4	63.5	8.6	43.6	17.4	69.9	8.1	43.3	17.5	68.9	7.7	42.9	17.9	68.6	7.2	42.8	18.1	68.0

	1964				1965				1972				1973				1974				1975			
Rating	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T
DM	10.0	54.0	20.9	84.9	10.3	54.8	21.4	86.5	8.4	55.2	22.9	86.7	8.6	55.2	22.9	86.7	7.5	57.7	20.6	85.8	5.0	53.4	24.8	83.2
LI	4.5	41.9	22.7	69.0	3.9	41.0	22.0	66.9	3.2	42.9	26.8	72.9	2.4	42.4	26.5	71.4	4.5	39.5	28.2	72.2	3.7	43.0	25.1	71.8
MU	19.3	57.2	13.8	90.3	19.4	57.3	13.4	90.1	24.2	52.6	12.0	88.8	24.2	52.6	12.0	88.8	22.0	53.2	12.0	87.3	22.2	53.0	11.4	86.6
Miscella-neous Avg	14.6	53.8	16.9	85.4	14.3	53.7	17.0	85.0	14.9	51.0	18.5	84.4	14.7	50.8	18.5	84.0	13.5	51.5	18.4	83.4	12.8	50.2	18.5	81.5
BR	0.3	25.0	33.3	58.7	0.7	24.0	31.6	56.3	1.1	24.7	28.1	53.9	1.2	26.2	28.0	55.5	1.4	24.5	25.2	51.0	1.7	27.8	21.7	51.3
BT	0.9	24.3	26.9	52.2	1.2	25.2	25.9	52.3	2.4	38.5	25.4	66.4	2.3	39.3	26.2	67.8	2.2	36.3	25.0	63.5	2.0	37.9	27.3	67.2
EM	6.1	56.9	22.7	85.7	6.2	57.0	22.6	85.8	15.0	58.9	13.9	87.8	16.6	58.2	12.8	87.6	18.0	56.0	12.5	86.5	18.2	55.5	12.0	85.8
EN	3.5	38.1	24.5	66.1	3.1	34.1	23.0	60.3	3.5	39.3	24.0	66.7	3.3	40.5	23.9	67.7	2.9	36.9	24.0	63.8	3.0	39.9	23.7	66.6
HT	1.3	26.3	25.8	53.4	1.2	26.0	25.2	52.4	2.2	38.6	25.9	66.6	2.3	39.7	25.6	67.6	2.2	36.7	24.7	63.6	2.8	38.6	24.8	66.1
IC		-		-		-		-		-		-	17.4	64.9	11.9	94.2	18.1	55.9	12.4	86.5	17.0	65.3	11.5	93.8
ML	2.6	31.4	28.4	62.4	2.8	30.8	30.8	64.4	2.0	46.7	30.2	78.9	2.0	46.0	30.2	78.2	2.7	45.3	29.3	77.3	2.2	45.3	28.8	76.3
MM	4.8	43.1	24.3	72.3	5.8	47.6	22.2	75.7	16.6	54.8	13.5	84.9	19.3	56.3	11.2	86.8	21.5	55.2	10.4	87.2	21.7	56.4	9.8	87.9
MR	5.5	45.7	25.1	76.4	5.8	45.7	25.5	77.0	4.5	50.1	24.2	78.7	4.6	50.6	23.9	79.1	4.9	48.9	23.1	76.9	4.6	49.6	21.5	75.7
PM	5.6	42.0	27.8	75.3	4.7	40.7	28.0	73.3	5.4	50.0	17.6	73.0	5.0	46.6	19.9	71.4	2.0	36.4	24.8	63.2	3.5	47.9	19.0	70.4
Engin'rng &Hull Avg	3.8	40.0	24.7	68.5	4.2	41.5	23.9	69.6	9.5	48.1	19.3	76.9	11.4	50.2	17.8	79.3	12.5	47.9	17.0	77.4	13.1	50.3	16.4	79.7
BU	3.3	42.8	27.2	73.3	3.8	40.8	28.2	72.8	3.5	41.3	26.7	71.5	3.4	46.0	24.1	73.5	4.2	42.7	26.0	72.8	5.0	45.2	23.5	73.8
CE	4.8	53.0	22.3	80.1	5.9	53.5	21.6	81.0	6.4	53.2	20.0	79.6	6.4	54.4	19.3	80.1	7.5	50.6	19.1	77.2	7.3	52.2	19.3	78.8
CM	4.1	42.6	24.8	71.6	5.1	42.4	25.2	72.7	3.7	41.0	23.5	68.2	3.9	43.5	23.0	70.4	4.2	42.0	22.3	68.4	4.5	40.0	20.7	65.3
CU		-		-	21.4	60.7	17.9	100.0	14.7	79.4	0.0	94.1	14.7	76.5	2.9	94.1	11.8	79.4	2.9	94.1	17.6	70.6	5.9	94.1
EA	25.5	53.6	12.5	91.7	28.6	51.2	12.7	92.5	17.5	57.2	12.8	87.5	18.1	51.9	14.0	84.0	17.2	49.6	14.6	81.4	18.8	57.6	16.5	92.9
EO	1.9	33.4	24.9	60.2	2.0	34.3	24.9	61.2	2.9	34.7	22.9	60.4	4.0	38.7	22.3	65.0	4.1	36.7	22.3	63.1	4.6	40.4	20.4	65.5
EQ		-		-	15.8	57.9	10.5	84.2	10.7	64.3	21.4	96.4	13.8	62.1	24.1	100.0	14.3	60.7	21.4	96.4	13.3	70.0	13.3	96.7

	1964				1965				1972				1973				1974				1975			
Rating	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T
SW	2.6	40.1	29.0	71.7	3.0	41.1	27.9	71.9	2.7	40.2	27.0	69.9	3.9	44.4	24.9	73.2	3.1	42.8	24.8	70.6	3.4	45.5	23.2	72.1
UT	3.3	37.4	27.3	68.0	4.1	37.1	28.1	69.3	3.3	36.4	26.5	66.2	3.3	39.7	26.3	69.3	4.1	40.2	25.8	70.2	4.6	42.2	24.9	71.7
Construction Avg.	3.8	41.4	25.3	70.6	4.6	41.4	25.5	71.5	4.3	41.5	23.6	69.4	4.7	44.6	22.7	72.0	5.2	42.7	22.8	70.8	5.3	44.3	21.6	71.2
AB	1.5	33.5	26.7	61.7	1.7	32.3	26.5	60.5	2.8	42.6	24.3	69.7	2.5	41.0	24.8	68.3	2.1	32.8	25.3	60.2	1.9	32.7	25.1	59.7
AC	10.7	69.8	14.7	95.2	10.3	69.1	15.7	95.1	17.4	70.6	9.6	97.6	14.7	72.4	10.4	97.5	13.8	71.7	11.0	96.5	13.4	72.2	11.2	96.8
AD	3.9	44.3	25.1	73.3	3.5	44.1	25.8	73.4	3.2	48.8	25.8	77.8	3.0	47.5	25.9	76.4	3.0	45.6	24.5	73.1	2.0	65.0	16.1	83.2
AE	5.0	59.3	23.0	87.4	4.8	57.8	23.4	85.9	6.7	64.8	19.1	90.6	6.0	64.4	19.5	89.8	6.1	63.4	19.7	89.2	5.6	63.2	20.1	88.9
AF		-		-	33.4	53.8	10.2	97.5	17.0	59.7	17.3	94.0	14.6	60.9	17.1	92.6	13.2	58.7	19.8	91.7	10.8	56.9	22.9	90.6
AG	12.9	67.8	15.6	96.3	13.5	66.6	15.3	95.3	18.7	66.3	12.1	97.1	18.3	67.0	11.9	97.2	18.6	65.7	12.9	97.2	17.7	66.7	12.3	96.7
AK	3.0	43.9	23.6	70.5	2.8	41.6	24.0	68.3	4.0	41.1	22.1	67.2	3.6	40.1	22.6	66.3	2.8	35.4	22.0	60.1	2.2	34.1	22.8	59.0
AM	3.0	42.9	25.3	71.2	2.8	42.4	25.9	71.1	3.3	50.0	25.0	78.3	3.2	49.2	24.6	77.1	3.2	45.9	24.4	73.5	3.2	46.2	24.6	74.0
AO	3.7	47.0	25.8	76.5	3.5	45.9	26.4	75.8	4.8	55.8	22.3	82.9	3.7	52.8	24.2	80.7	3.5	50.2	24.2	77.8	3.3	50.4	24.6	78.3
AQ	21.5	62.5	15.3	99.4	23.5	69.4	6.4	99.3	21.2	69.6	7.9	98.7	19.6	70.9	8.1	98.6	20.0	71.3	7.4	98.7	20.1	71.1	7.3	98.5
AS		-		-		-		-	11.7	50.4	16.0	78.1	9.2	49.6	16.9	75.7	6.7	43.7	20.2	70.6	5.3	43.1	20.1	68.4
AT	21.4	70.2	7.0	98.6	21.0	70.5	7.0	98.5	19.5	70.7	8.1	98.3	19.5	70.5	8.3	98.3	20.6	70.0	7.7	98.3	20.3	69.8	8.0	98.1
AV		-		-	53.8	43.0	3.2	100.0	26.6	67.7	5.3	99.6	23.8	69.1	6.0	98.9	22.8	69.7	6.4	98.9	23.9	68.1	7.1	99.1
AW		-		-		-		-	22.3	68.7	7.0	98.0	20.1	70.5	7.3	98.0	19.4	71.2	7.2	97.8	19.1	71.9	7.0	98.0
AX	18.6	72.3	7.8	98.6	20.2	71.0	7.3	98.4	18.1	72.9	7.7	98.8	19.1	71.4	8.0	98.5	21.3	70.4	7.3	98.9	21.3	70.3	7.0	98.6
AZ	7.3	63.0	20.9	91.2	4.5	51.1	25.1	80.8	8.5	57.3	21.0	86.9	7.7	55.8	20.8	84.3	7.3	51.8	21.3	80.4	5.3	50.1	21.9	77.3
PH	13.1	60.3	16.4	89.8	13.1	58.8	16.7	88.6	16.0	59.2	15.8	91.0	16.0	61.4	14.3	91.7	16.4	59.9	14.0	90.3	16.1	61.3	13.6	91.0
PR	2.8	48.7	31.4	82.9	2.7	47.9	31.6	82.3	6.2	55.5	24.2	85.9	5.1	56.5	24.3	86.0	4.9	55.9	23.8	84.6	5.0	55.9	24.8	85.7

	1964				1965				1972				1973				1974				1975			
Rating	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T	I	II	IIIU	T
PT	24.3	64.0	9.5	97.8	22.5	65.5	9.2	97.2	16.1	67.6	14.5	98.2	17.2	67.7	13.4	98.3	18.0	66.6	13.2	97.7	18.3	66.7	12.4	97.3
TD	21.8	67.4	8.4	97.7	22.2	66.9	8.4	97.5	27.5	64.3	6.9	98.6	25.1	66.3	7.1	98.5	24.6	66.8	7.3	98.6	23.5	67.1	7.8	98.4
Aviation Average	8.2	52.6	20.5	81.3	8.2	52.0	20.8	80.9	9.5	57.2	18.7	85.5	8.8	56.4	19.0	84.3	9.2	54.5	18.4	82.1	8.3	58.4	17.1	83.3
HM	8.8	58.1	22.7	89.7	9.2	58.5	22.4	90.1	12.1	61.2	19.6	92.9	11.9	60.8	19.4	92.1	8.8	40.4	11.9	61.1	12.8	62.4	17.7	93.0
Medical Average	8.8	58.1	22.7	89.7	9.2	58.5	22.4	90.1	12.1	61.2	19.6	92.9	11.9	60.8	19.4	92.1	8.8	40.4	11.9	61.1	12.8	62.4	17.7	93.0
DT	7.2	57.9	22.5	87.6	7.1	57.5	22.6	87.1	10.0	57.9	21.3	89.1	8.0	56.7	23.2	88.0	8.8	58.8	21.4	89.0	7.7	59.5	21.2	88.3
Dental Average	7.2	57.9	22.5	87.6	7.1	57.5	22.6	87.1	10.0	57.9	21.3	89.1	8.0	56.7	23.2	88.0	8.8	58.8	21.4	89.0	7.7	59.5	21.2	88.3
Grand Total	7.2	45.9	20.6	73.7	7.5	46.1	20.5	74.1	10.8	51.9	17.4	80.1	10.9	52.3	17.1	80.3	11.7	52.1	17.2	81.0	11.0	52.9	16.3	80.2

TABLE 16

School Eligibles by Criticality of Personnel

FY 75

Percent of School Eligibles	Ratings			
	with personnel shortages		with personnel sufficiencies/excesses	
	#	(cum.#)	#	(cum.#)
90-100% (90%+)	17	(17)	14	(14)
80-89% (80%+)	7	(24)	8	(22)
70-79% (70%+)	5	(29)	7	(29)
60-69% (60%+)	4	(33)	6	(35)
50-59% (50%+)	2	(35)	2	(37)
40-49% (40%+)	1	(36)	-	(37)
30-39% (30%+)	1	(37)	-	(37)
20-29% (20%+)	-	-	1	(38)
Total Ratings		37		38

TABLE 17

School Eligibles by
High Skill - Low Manning Ratings

Occupation Group	Rating	Percent of School Eligibles for FY 75
Ordnance	FT	98.5
	GM	62.7
	GMT	85.2
Engineering & Hull	BR	51.3
	BT	67.2
	HT	66.1
	IC	93.8
	MR	75.7
Administration	CT	98.1
	RM	90.4
Aviation	AC	96.8
	AE	88.9
	AF	90.6
	AO	78.3
	AV	99.1
	AW	98.0
	AX	98.6

TABLE 18

High School Graduates
Ratings and Navy Occupation Groups
FY 1965 and 1973

RATING	1965			1973			1965 v. 1973 Change in Percentage Points
	Total	HS Grad	%	Total	HS Grad	%	
BM	12,232	2,848	23.2	9,341	6,791	72.7	+49.5
QM	-	-	-	1,024	995	97.2	-
OS	7,611	5,222	68.6	5,378	5,092	94.7	+26.1
OT	-	-	-	858	838	97.7	-
QM	4,606	2,463	53.5	3,505	3,181	91.0	+37.5
SM	3,819	1,507	39.5	2,753	2,348	85.3	+45.8
ST	4,569	3,188	70.0	5,484	5,307	97.0	+27.0
Deck Average	32,837	15,228	46.4	28,343	24,552	86.6	+40.2
FT	7,789	6,294	80.8	9,596	7,676	80.0	-0.8
GM	7,383	2,326	31.5	209	168	80.4	+48.9
GMT	1,187	812	68.4	1,298	1,187	91.4	+23.0
MN	500	285	57.0	437	394	90.2	+33.2
MT	1,364	1,165	85.4	1,368	1,344	98.2	+12.8
TM	4,390	2,501	57.0	3,745	3,379	90.2	+33.2
Ordnance Average	22,613	13,383	59.2	16,653	14,148	85.0	+25.8
DS	785	688	87.6	1,673	1,610	96.2	+8.6
ET	13,047	11,496	88.1	19,396	19,151	98.7	+10.6
Electronics Average	13,832	12,184	88.1	21,096	20,761	98.4	+10.3
IM	319	202	63.3	339	318	93.8	+30.5
OM	589	438	74.4	429	411	95.8	+21.4
Prec.Equip. Average	908	640	70.5	768	729	94.9	+24.4
CS	10,108	2,960	29.3	7,350	5,472	74.4	+45.1
CT	7,218	5,945	82.4	9,275	9,085	98.0	+15.6
DK	2,181	1,607	74.0	1,960	1,788	91.2	+17.2
DP	1,755	1,386	80.0	2,668	2,565	96.1	+16.1
JO	546	470	86.1	447	435	97.3	+11.2

RATING	1965			1973			1965 v. 1973 Change in Percentage Points
	Total	HS Grad	%	Total	HS Grad	%	
LN	-	-	-	270	255	94.4	-
PC	1,106	655	59.2	918	830	90.4	+31.2
PN	5,933	4,265	72.0	6,092	5,701	94.0	+22.0
RM	129	82	64.0	15,759	14,632	92.8	+28.8
SD	6,278	1,686	27.0	6,964	5,154	74.0	+47.0
SH	4,572	1,211	26.5	3,479	2,510	72.0	+45.5
SK	9,799	5,976	61.0	8,054	6,930	86.0	+25.0
YN	12,923	9,676	75.0	10,708	9,999	93.4	+18.4
Admnistrative Avg.	62,548	35,919	57.4	73,944	65,356	88.4	+31.0
MU	1,149	1,033	89.9	1,102	1,059	96.1	+6.2
Miscellaneous Avg.	1,149	1,033	89.9	1,102	1,059	96.1	+6.2
BR	307	84	27.4	280	141	78.3	+50.9
BT	10,478	3,897	37.2	7,499	5,979	79.7	+42.5
EM	13,668	9,797	72.0	10,731	10,173	94.8	+22.8
EN	11,496	5,464	47.5	7,235	5,972	82.5	+35.0
HT	10,179	4,002	39.3	168	137	81.5	+42.2
IC	5,499	4,450	80.9	4,183	4,039	96.6	+15.7
ML	198	86	43.4	7.738	6,428	83.1	+39.7
MM	19,017	11,374	59.8	19,792	18,399	93.0	+33.2
MR	2,418	1,481	61,2	1,938	1,785	92.1	+30.9
PM	129	82	64.0	138	128	93.0	+29.0
Engnring & Hull Avg.	73,696	40,717	55.2	59,602	53,181	89.2	+34.0
BU	1,517	867	57.2	1,551	1,318	85.0	+27.8
CE	963	611	63.4	1,040	943	91.0	+27.6
CM	1,039	488	47.0	1,100	902	82.0	+35.0
CU	28	12	43.0	36	33	92.0	+49.0
EA	180	156	87.0	247	241	97.6	+10.6
EO	1,576	599	38.0	1,735	1,336	77.0	+39.0
EQ	19	16	84.2	32	31	97.0	+12.8
SW	506	273	54.0	605	499	82.5	+28.5
UT	848	410	48.3	860	735	85.5	+37.2
Construction Avg.	6,676	3,432	51.4	7,205	6,038	83.8	+32.4

RATING	1965			1973			1965 v. 1973 Change in Percentage Points
	Total	HS Grad	%	Total	HS Grad	%	
AB	4,40	1,793	40.0	112	97	86.6	+46.6
AC	2,626	1,887	72.0	2,292	2,184	95.3	+23.3
AD	17,335	9,768	56.3	504	461	91.5	+35.2
AE	7,768	5,318	68.5	6,718	6,257	93.1	+24.6
AF	316	247	78.2	394	372	94.4	+16.6
AG	1,924	1,565	81.3	1,429	1,378	96.4	+15.1
AK	3,240	1,989	61.4	3,303	2,981	90.3	+28.9
AM	12,346	7,191	58.2	380	355	93.4	+35.2
AO	5,030	2,738	54.4	4,301	3,790	88.1	+33.7
AQ	2,209	1,903	86.1	3,253	3,182	97.8	+11.7
AS	-	-	-	552	469	84.0	-
AT	10,955	8,956	81.8	9,388	9,091	96.8	+15.0
AV	158	126	79.7	280	269	96.1	+16.4
AW	-	-	-	2,040	1,932	94.7	-
AX	2,282	1,862	81.6	963	920	95.5	+13.9
AZ	1,130	764	67.6	2,677	2,541	94.9	+27.3
PH	2,528	1,730	68.4	1,968	1,849	94.0	+25.6
PR	1,921	962	50.1	1,526	1,369	89.7	+39.6
PT	362	307	84.8	454	447	98.5	+13.7
TD	1,514	1,195	78.9	1,539	1,412	91.7	+12.8
Aviation Average	78,124	50,301	64.4	44,073	41,356	93.8	+29.4
HM	13,635	9,706	71.2	15,578	14,820	95.1	+23.9
Medical Average	13,635	9,706	71.2	15,578	14,820	95.1	+23.9
DT	1,835	1,309	71.3	2,216	2,109	95.2	+23.9
Dental Average	1,835	1,309	71.3	2,216	2,109	95.2	+23.9
Grand Total	307,853	183,852	59.7	274,272	244,109	89.0	+29.3

V

FIGURES

FIGURE 1

Relationship Between GCT Levels
and Education Levels
(Recruit Accessions)
1966 - 1973

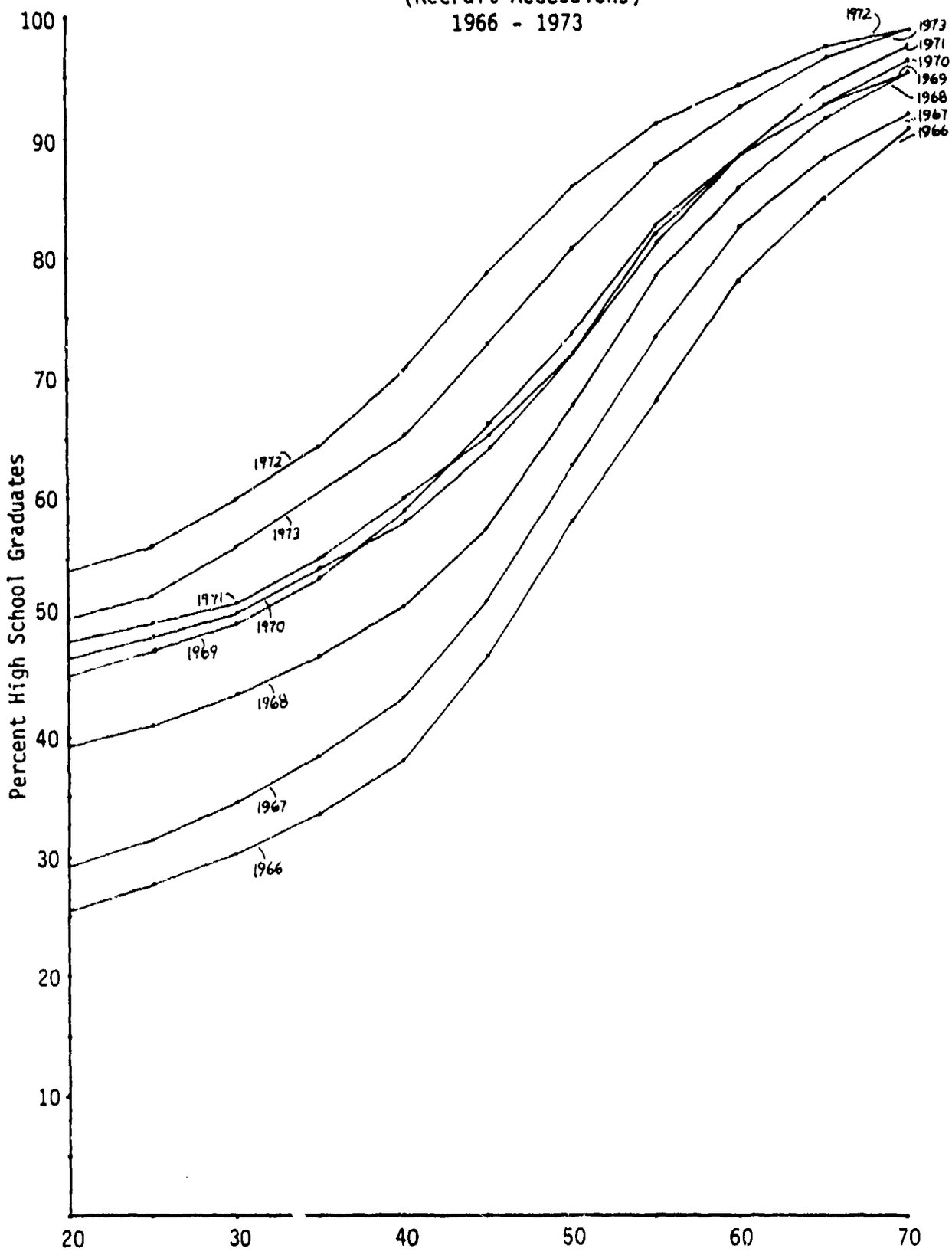
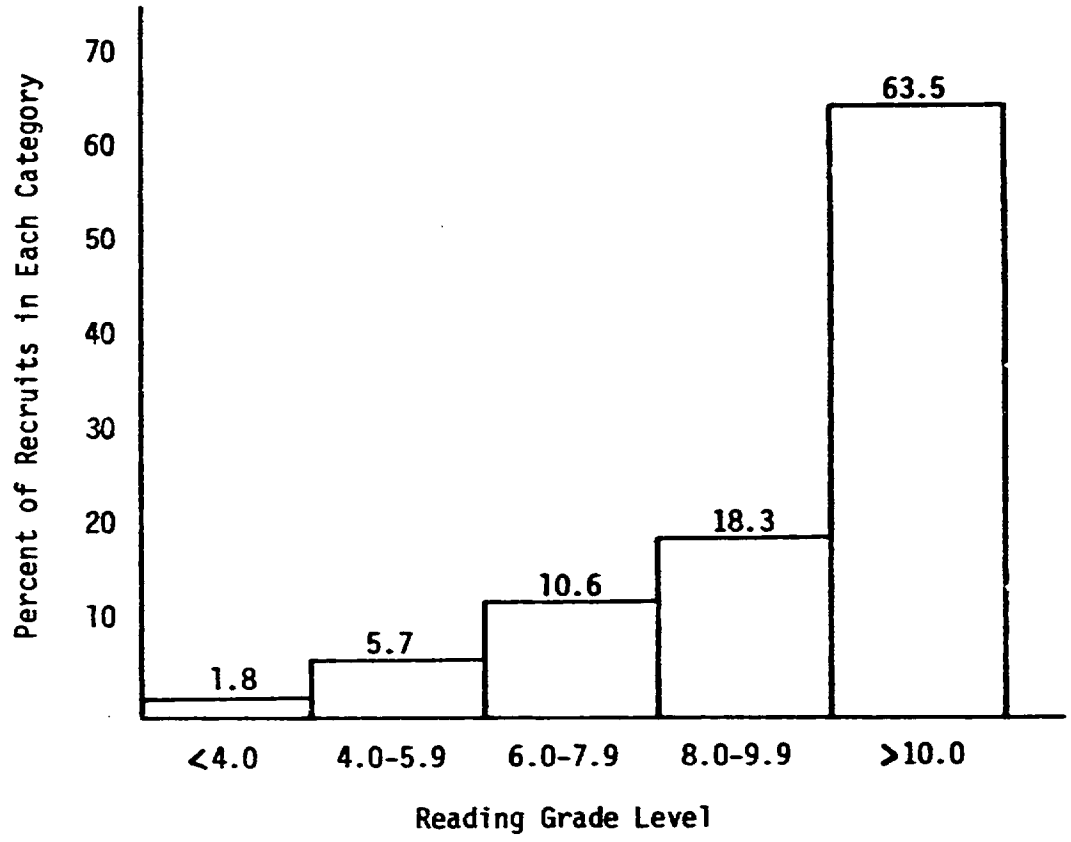


FIGURE 2

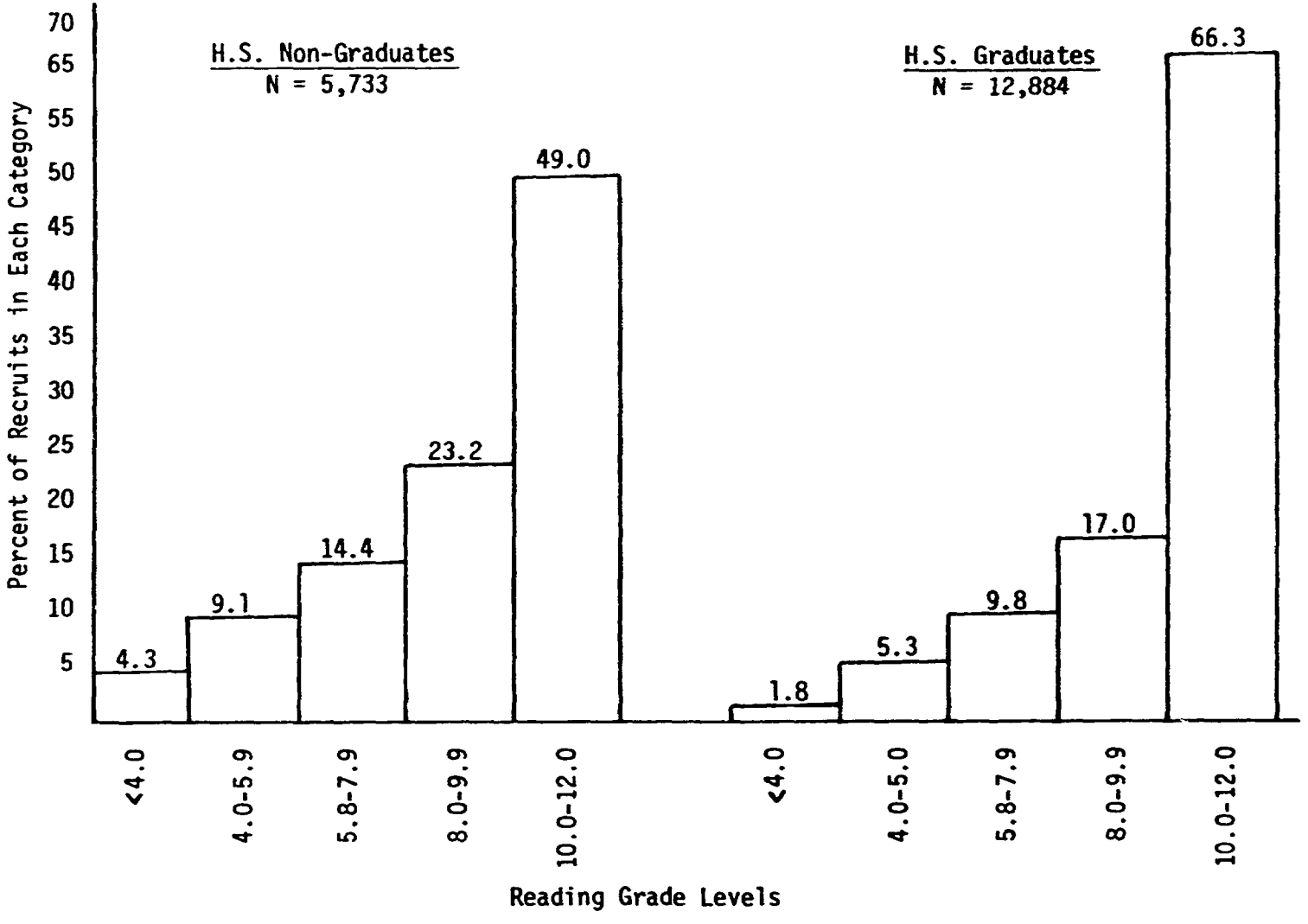
Reading Grade Level
Distribution of Reading Levels of Recruits at
San Diego Recruit Training Command (N = 24,729)



Source: T. M. Duffy, Naval Personnel Research and Development Center, Literacy Research in the Navy, October 1975.

FIGURE 3

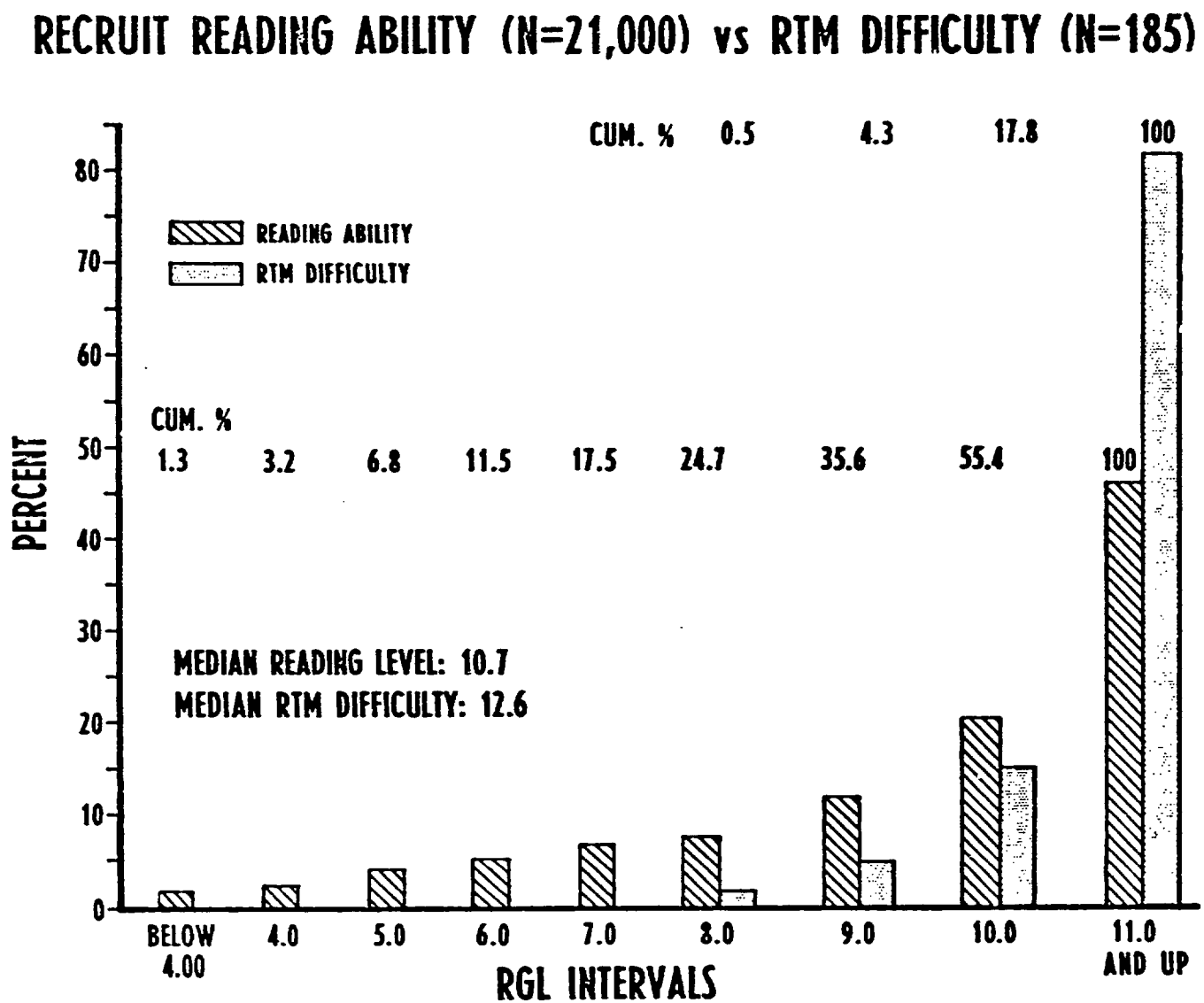
Reading Levels for High School Graduates and Non-Graduates at RTC



Source: T. M. Duffy, Naval Personnel Research and Development Center, Literacy Research in the Navy, October 1975.

FIGURE 4

Comparison of Recruit Reading Abilities
and Training Manual Difficulty



Source: T. E. Curran, Naval Personnel R & D Center, Readability Research in the Navy, October, 1975.

VI

APPENDICES

APPENDIX A

CONVERSION TABLE FOR BTB7-AFQT*

MENTAL GROUP	BTB-7 G+A+M SCORE	EQUIVALENT AFQT PERCENTILE SCORE
I	211 or higher	99
	205-210	98
	200-204	97
	196-199	96
	193-195	95
	191-192	94
	190	93
II	188-189	92
	187	91
	185-186	90
	184	89
	182-183	88
	181	87
	180	86
	179	85
	177-178	84
	176	83
	175	82
	174	81
	173	80
	172	79
	171	78
	170	76
	169	75
	168	74
	167	73
	166	71
	165	70
	164	69
	163	67
	162	66
	161	65
upper III	160	64
	159	62
	158	61
	157	60
	156	59
	155	58
	154	56
	153	55
upper III (cont'd)	152	54
	151	53
	150	52
	149	50
	148	49
lower III	147	48
	146	47
	145	45
	144	44
	143	43
	142	41
	141	39
	140	38
	139	36
	138	35
	137	33
	136	32
IV	135	30
	134	29
	133	28
	132	27
	131	26
	130	25
	129	24
	128	23
	126-127	22
	125	21
	124	20
	123	19
	122	18
	120-121	17
	119	16
	118	15
	116-117	14
	114-115	13
	112-113	12
	109-111	11
	107-108	10
V**	97-106	9
	96 or lower	8

* Eight forms of the BTB-AFQT have been developed over the years, but BTB7-AFQT and BTB8-AFQT apply to the vast majority of enlisted personnel presently on active duty.

** Mental Group Category V is no longer considered.

APPENDIX B

CONVERSION TABLE FOR BTB8-AFQT*

MENTAL GROUP	BTB-8 G+A+M SCORE	EQUIVALENT AFQT PERCENTILE SCORE
I	214 or higher	99
	209-213	98
	204-208	97
	200-203	96
	197-199	95
	196	94
	194-195	93
II	192-193	92
	191	91
	188	89
	186-187	88
	185	87
	184	86
	182-183	85
	181	84
	180	83
	179	82
	178	81
	177	80
	176	79
	175	78
	174	77
	173	76
	172	75
	171	74
	170	73
	169	72
	168	71
	167	70
	166	69
	165	68
	164	66
	163	65
upper III	162	64
	161	63
	160	62
	159	61
	158	60
	157	58
	156	57
	155	56
	154	55
upper III (cont'd)	153	54
	152	53
	151	52
	150	51
	149	50
	148	49
lower III	147	48
	146	47
	145	45
	144	44
	143	43
	142	41
	141	40
	140	39
	139	37
	138	36
	137	35
	136	33
	135	32
IV	134	30
	133	29
	132	28
	131	27
	130	26
	129	25
	128	24
	127	23
	126	22
	125	21
	124	20
	123	19
	122	18
	120-121	17
	118-119	16
	117	15
	116	14
	114-115	13
	111-113	12
	109-110	11
	104-108	10
V**	99-103	9
	98 or lower	8

* Eight forms of the BTB-AFQT have been developed over the years, but BTB7-AFQT and BTB8-AFQT apply to the vast majority of enlisted personnel presently on active duty.

** Mental Group Category V is no longer considered.

APPENDIX C

AFQT Percentile Score	Mental Group Category
98-100	I
93-97	I
82-92	II
65-81	II
49-64	III
31-48	III
21-30	IV
13-20	IV
10-12	IV
9-below	V

Ch. 1 - 30 Jun 76

APPENDIX D

DEPARTMENT OF THE NAVY
Bureau of Naval Personnel
Washington, D.C. 20370

BUPERSINST 1133.25C
Pers-2124
3 December 1975

BUPERS INSTRUCTION 1133.25C

From: Chief of Naval Personnel
To: All Ships and Stations (less Marine Corps field addressees not having Navy personnel attached)

Subj: Career Reenlistment Objectives (CREO)

Ref: (a) BUPERSMAN 1040300 (Reenlistment)
(b) BUPERSINST 1130.22A (Broken-service Reenlistment)
(c) BUPERSINST 1133.22D (Reenlistment Quality Control)
(d) BUPERSMAN 2230180 (Lateral Conversion)
(e) BUPERSMAN 1060010 (SCORE Program)
(f) BUPERSMAN 1060020 (STAR Program)
(g) COMNAVCRUITCOMINST 1130.8A (Navy Recruiting Manual—Enlisted)

Encl: (1) Open/Closed Rating/Rate Lists
(2) Brief sheet (detach and utilize as appropriate, then destroy)

1. **Purpose.** To establish objectives for enlisted career force management and to provide guidelines for the operation of current and future Navy programs designed to achieve those objectives.

2. **Cancellation.** This instruction supersedes BUPERS Instruction 1133.25B and is effective 1 January 1976.

3. **Objectives**

a. Increase manning in undermanned ratings.

b. Control overages in overmanned ratings.

c. Provide for more viable and attractive career patterns for all members of the naval service.

4. **Discussion.** Proper management of the Navy's enlisted career force requires an individual profile for each rating to provide optimum paygrade and length-of-service (LOS) distribution of resources by rating within CNO requirements. Historically, certain ratings/rates have been overmanned to the point of advancement stagnation while others have suffered from undermanning. It is necessary to provide positive managerial control over the existing programs defined by references (a) through (g) to balance personnel assets against needs. The CREO management program provides a meaningful system under which the objectives set forth in paragraph 3 can be attained. Existing retention, conversion, and certain enlistment procurement programs will be governed by needs as depicted in the Open/Closed Rating/Rates lists. Enclosure (1) will be updated periodically to reflect the manpower needs of the Navy.

5. **Definitions**

a. **Career personnel** - Enlisted personnel on active duty with over 4 years' active service.

b. **Career requirements** - The number of enlisted billets required in paygrade E-5 and above.

c. **Career manning** - Ratio of career personnel to career requirements in the force.

d. **Career Reenlistment Objective** - CREO is a personnel management system designed to provide current goals and direction for retention, conversion, and certain enlistment procurement programs. In this context, CREO provides centralized systematic guidance in enlisted career force management.

e. **First reenlistment** - Action which obligates a member to serve at least 2 years beyond initial active-duty obligation. In the case of 6 year obligors (6YO's) who have initially enlisted for 4 years and agreed to extend for two or more additional years, the operation of the extension is a first reenlistment for purposes of CREO.

f. **Subsequent reenlistment** - Action which obligates a member to serve beyond the first reenlistment. For the purpose of CREO, this includes any extension of the first reenlistment as defined above, of two or more years.

g. **Rating** - An occupational specialty which encompasses related aptitudes, training, experience, knowledge and skills.

h. **Rate** - Identifies personnel by rating and pay-grade (Example: RM3).

i. **Rate manning** - Ratio of personnel in a rate to requirements for that rate.

j. **CREO Groups** - Five groups are established within the CREO System. Groups A through E reflect specified conditions of career manning within individual ratings, ranging from extremely short to excessively overmanned.

(1) Group A - Rating career manning is less than 75 percent; extreme shortage of career strength relative to career requirements.

(2) Group B - Rating career manning is between 75 and 89 percent; shortage of career strength relative to career requirements.

(3) Group C - Rating career manning is approximately correct (90-105%); management is designed to stabilize at present levels.

(4) Group D - Rating career manning is in excess of 105 percent. First-term reenlistments need not be directly controlled, but to reduce overmanning, other actions may be employed, e. g., conversion programs, non-continuation, etc.

(5) Group E - Rating career manning is in excess of 105 percent; ratings are under direct control of CHNAVPERS. CHNAVPERS approval is required for all first-term reenlistments or extensions to initial enlistment, including extensions on active duty for Naval Reservists. Subsequent reenlistments may require CHNAVPERS approval. CHNAVPERS approval for continuation on active duty beyond 21 years may be required on a case basis. Applicable notes on Open/ Closed Rating/Rate Lists apply.

k. **CREO Categories** - Five categories are established within the CREO system. Categories A through E reflect specific conditions of rate manning within individual ratings, ranging from extremely short to excessively overmanned.

(1) Category A - Rate manning is less than 75 percent; extreme shortage of personnel in rate.

(2) Category B - Rate manning is between 75 and 89 percent; shortage of personnel in rate.

(3) Category C - Rate manning is between 90 and 105 percent; rate manning is approximately correct; management is designed to stabilize at present levels.

(4) Category D - Rate manning is in excess of 105 percent; voluntary conversions to Groups A or B ratings are recommended if rating is also Group D.

(5) Category E - Rate manning is in excess of 105 percent. Conversion may be directed on an involuntary basis.

l. **Open Skills** - Special designations/NECs/skills which are critically undermanned and considered to be in CREO Group/Category A, without regard for the manning of the associated ratings.

6. **Action.** The following actions shall be taken to insure positive management of individual rating and rate manning levels through implementation of career strength enhancing programs currently in effect, as well as those which may be developed in the future:

a. **Prior Service Members.** Former members of the naval service who have been separated in excess of 24 hours shall be reenlisted at Navy recruiting activities in accordance with the guidance of references (b) and (g).

b. **Active-Duty Members.** Retention and rating conversion programs for active-duty members shall be governed by the following guidelines:

(1) Personnel in CREO Groups A and B will continue to be counseled at all levels of command concerning the advantages and opportunities of a Navy career in their current rating. Conversion from these ratings will not normally be authorized. Group A and B ratings are open for entry.

(2) Personnel in CREO Group C who qualify for assignment of reenlistment eligibility code RE-R1 shall be encouraged to reenlist in their present rating. Personnel who qualify for the assignment of reenlistment

eligibility code RE-1 should be counseled concerning the benefits to be gained through rating conversion as well as the increased advancement opportunity accruing to members of CREO Groups A and B. Personnel in CREO Group C whose current rate is CREO Category A, B, or C will not normally be approved for rating conversion; however, requests will be considered on a case basis. Personnel whose current rate is CREO Category D or E may apply for rating conversion at any time. Category A and B ratings of Group C ratings are open for entry. Category C, D, or E rates of Group C ratings are closed.

(3) Personnel in CREO Group D will be counseled concerning the advisability of rating conversion. Such counseling will include information concerning limited advancement opportunities in their current rating, as well as the professional growth criterion of reference (c), which must be met in order to establish eligibility for service beyond 21 years. Those members in this rating group who qualify for reenlistment eligibility Code RE-R1 who elect to be separated are required to acknowledge the following Page 13 service record entry:

> (date): "I understand that if I elect to be separated in excess of 24 hours, reenlistment will require approval of the Chief of Naval Personnel. I further understand that, if I am separated in excess of three months, I will be required to request rating conversion in order to be eligible to reenlist if my rating is in CREO Group D or E."

Those members in this rating group, qualifying for reenlistment eligibility code RE-1, who elect to be separated are required to acknowledge the following Page 13 entry:

> (date): "I understand that if I elect to be separated in excess of 24 hours, reenlistment will require approval of the Chief of Naval Personnel. I further understand that, if my rating is in CREO Group D or E, in order to be eligible to reenlist I will be required to request conversion from my present rating. Should my conversion request not be approved, I will be permitted to reenlist in paygrade E-3 only in a general apprenticeship."

Responsibility for accomplishment of the above Page 13 entry shall be that of the last command to which the member is regularly attached for duty, and not necessarily the activity effecting separation.

(4) Personnel in CREO Group E will be required to obtain approval of CHNAVPERS in order to be eligible to effect a first reenlistment, or make operative or cancel any extension to the initial enlistment. Approval is also required for Naval Reservists serving on active duty who desire to extend their active duty. Subsequent reenlistments and extensions thereto will require CHNAVPERS approval only if so indicated in the notes section of the current Open/Closed Rating/Rate Lists. (R

(a) Three months prior to completing an enlistment or effecting any extension, the member who desires continued active naval service must submit an Enlisted Transfer and Special Duty Request (NAVPERS 1306/7). This request shall state whether the member desires to reenlist/extend in present rating or desires rating conversion. In any case, preferences for rating conversion to ratings in CREO Groups A or B of the latest list must be stated in the event the member is not accepted for reenlistment in present rating. The commanding officer's endorsement will include a definitive recommendation as to the desirability of retaining the member in naval service. This endorsement should also make a specific recommendation as to the member's aptitude for conversion to alternate ratings selected. Requests shall include as an enclosure a copy of the most recent page 9 and a summary of all NJPs awarded during current enlistment. In cases where there will be insufficient time remaining in the member's enlistment to allow orderly processing of the request, the member may be extended by the commanding officer for a period of 3 months pending final action by CHNAVPERS, citing this instruction as authority.

(b) Should members not be accepted for reenlistment/extension in present rating, they will be offered rating conversion. Conversion training will be

authorized as required. Should members offered rating conversion decline the offer, they shall be discharged (or released from active duty if Naval Reservist) at End of Active Obligated Service (EAOS) and required to acknowledge the following Page 13 service record entry:

(date): "I understand that I have been denied reenlistment in my present rating due to manning considerations under the provisions of BUPERSINST 1133.25C and in accordance with CHNAVPERS ltr_____. I was offered conversion to the _____ rating(s) which I declined. I further understand that as long as my present rating remains in CREO Group D or E of BUPERSINST 1133.25C that I will be required to request rating conversion in order to be eligible to reenlist and that if such request is disapproved, I will be authorized to reenlist at paygrade E-3 only in a general apprenticeship."

R) (c) Members who have executed but not made operative extensions to their first enlistment or term of active-obligated service are required to request authority to make the extension operative, or to cancel the extension.

(d) Members who have not executed extensions who do not desire to reenlist but who are otherwise eligible to reenlist or extend shall be discharged or released from active duty at EAOS and required to acknowledge the following Page 13 entry:

(date): "I understand that in order to be eligible to reenlist as long as my rating is in CREO Group D or E of BUPERSINST 1133.25C I must obtain the approval of the Chief of Naval Personnel. I further understand that, if my rating is in CREO Group D or E, I will be required to request rating conversion in order to be eligible to reenlist. Should my conversion request not be approved, I will be permitted to to reenlist in paygrade E-3 only in a general apprenticeship."

(e) Should requests for voluntary conversion be insufficient to meet career manning goals, reenlistment denial will be required if involuntary conversion is not accepted by the member.

(f) Rating conversion, whether voluntary or required, shall be effected under the provisions of either reference (d) or (e).

W. L. McDONALD
Deputy Chief of Naval Personnel

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APPENDIX E

Navy Ratings and Occupation Groups

Rating Abbrev.	Rating Description
Group I - Deck	
BM	Boatswain's Mate
MA	Master-At-Arms
QM	Quartermaster
SM	Signalman
OS	Operations Specialist
EW	Electronic Warfare Technician
ST	Sonar Technician
STG	Sonar Technician (Surface)
STS	Sonar Technician (Submarine)
OT	Oceanographic Technician
Group II - Ordnance	
TM	Torpedoman's Mate
GM	Gunner's Mate
GMM	Gunner's Mate Missiles
GMT	Gunner's Mate Technician
GMG	Gunner's Mate Guns
FT	Fire Control Technician
FTG	Fire Control Technician Guns
FTM	Fire Control Technician Surface Missile
FTB	Fire Control Technician Ballistic Missile
MT	Guided Missileman
MN	Mineman
Group III - Electronics	
ET	Electronic Technician
ETN	Electronic Technician Communications
ETR	Electronic Technician Radar
DS	Data Systems Technician
Group IV - Precision Equipment	
PI	Precision Intrumentman
IM	Instrumentman
OM	Opticalman

Rating Abbrev.	Rating Description
Group V - Administrative and Clerical	
NC	Navy Counselor
RM	Radioman
CTT	Communications Technician T
CTA	Communications Technician A
CTM	Communications Technician M
CTO	Communications Technician O
CTR	Communications Technician R
CTI	Communications Technician I
YN	Yeoman
LN	Legalman
PN	Personnelman
DP	Data Processing Technician
SK	Storekeeper
DK	Disbursing Clerk
CS	Commissaryman
SD	Steward
SH	Ship's Serviceman
JO	Journalist
PC	Postal Clerk
Group VI - Miscellaneous	
LI	Lithographer
DM	Illustrator Draftsman
MU	Musician
Group VII - Engineering and Hull	
MM	Machinist's Mate
EN	Engineman
MR	Machinery Repairman
BT	Boiler Technician
BR	Boilermaker
EM	Electrician's Mate
IC	IC Electrician
HT	Hull Technician
PM	Patternmaker
ML	Moler
GS	Gas Turbine System Technician
Group VIII - Construction	
CU	Construction Man
EA	Engineering Aide
CE	Construction Electrician
EQ	Equipmentman
EO	Equipment Operator

Rating Abbrev.	Rating Description
Group VIII - Construction (cont'd)	
CM	Construction Mechanic
BU	Builder
SW	Steelworker
UT	Utilities Man
Group IX - Aviation	
AF	Aircraft Maintenance Technician
AV	Avionics Technician
AD	Aviation Machinist's Mate
ADR	Aviation Machinist's Mate Reciprocating Engines
ADJ	Aviation Machinist's Mate Jet Engines
AT	Aviation Electronics Technician
AX	Aviation Antisubmarine Warfare Technician
AW	Aviation Antisubmarine Warfare Operator
AO	Aviation Ordnanceman
AQ	Aviation Fire Control Technician
AC	Air Controlman
AB	Aviation Boatswain's Mate
ABE	Aviation Boatswain's Mate Launch and Recovery
ABF	Aviation Boatswain's Mate Fuel Handling
ABH	Aviation Boatswain's Mate Aircraft Handling
AE	Aviation Electrician's Mate
AM	Aviation Structual Mechanic
AMS	Aviation Structual Mechanic Structures
AMH	Aviation Structual Mechanic Hydraulics
AMS	Aviation Structual Mechanic Safety Equipment
PR	Aircrew Survival Equipmentman
AG	Aerographer's Mate
TD	Training Deviceman
AK	Aviation Storekeeper
AZ	Aviation Maintenance Administrationman
AS	Aviation Support Equipment Technician
ASE	Aviation Support Equipment Technician Electrical
ASH	Aviation Support Equipment Technician Hydraulic/Structures
ASM	Aviation Support Equipment Technician Mechanical
PH	Photographer's Mate
PT	Photographic Intelligenceman

Rating Abbrev.	Rating Description
Group X - Medical	
HM	Hospital Corpsman
Group XI - Dental	
DT	Dental Technician

APPENDIX F

General Requirements for School Eligibility and Navy Induction

	High School Graduates	Non-High School Graduates
School Eligibles	A	B
Non-School Eligibles	C	D

"A" Group: Navy applicants who are eligible for a Navy School because of having graduated from high school.

"B" Group: Navy applicants who are eligible for a Navy School, despite non-high school graduation, because of having attained a score of at least:

(1) 148 on the GAM (GCT + ARI + MECH) on the Basic Test Battery (BTB or on the equivalent sub-tests of the Armed Services Vocational Aptitude Battery (ASVAB) for an AFQT of 49, or

(2) 100 on GCT + ARI (BTB), or WK + AR (ASVAB).

"C" Group: Navy applicants who are eligible for induction into the Navy because of having attained a score between:

(1) (for high school graduates) 125-134 on the GAM, for an AFQT of 21-30.

(2) (for GED high school equivalency) 135-147 on the GAM, for an AFQT of 31-48.

"D" Group: Navy applicants who normally are ineligible for induction into the Navy because of insufficient years-of-education and low performance on the BTB or ASVAB.

Note: Categories "A" and "B" represent the general requirements for eligibility to attend a Navy School. To attend a particular school, personnel must meet the specific aptitude criteria for that school (see Appendix G).

APPENDIX G

DEPARTMENT OF THE NAVY
Bureau of Naval Personnel
Washington, D.C. 20370

Canc frp: July 76

BUPERSNOTE 1236
Pers-551
3 March 1976

BUPERS NOTICE 1236

From: Chief of Naval Personnel
To: All Ships and Stations (less Marine Corps field addressees not having Navy personnel attached)

Subj: Armed Services Vocational Aptitude Battery (ASVAB); information concerning

Ref: (a) Catalog of Navy Training Courses (CANTRAC) (NAVTRA 10500)
(b) BUPERSMAN 1440220

Encl: (1) Qualifications for Formal Training
(2) Brief sheet (detach and utilize as appropriate, then destroy)

1. Purpose. To disseminate information on the Armed Services Vocational Aptitude Battery (ASVAB) which has replaced the Basic Test Battery (BTB) as the primary test utilized for enlistment screening and classification as of 1 January 1976.

2. Background

a. One form of ASVAB or another has been in use since 1968 in connection with the High School Training Program. Scores achieved by high school students have been used by counselors in discussing student aptitudes for civilian vocational training programs. Test results were also provided to local recruiting offices for seniors who could use scores to qualify for enlistment. Personnel entering the Navy on the basis of ASVAB scores were subsequently tested with the BTB at a recruiting station or training center, the same procedure that was followed when enlistment eligibility had been determined by the Armed Forces Qualification Test (AFQT) or the Short Basic Test Battery (SBTB).

b. In 1974, planning was initiated to develop a test battery which would provide each service aptitude measurement areas comparable to its current test battery, while at the same time achieving standardization of mental testing at the enlistment point.

c. The most recent ASVAB series (Forms 5, 6, and 7) includes sufficient subtests to compare with all subtests on the BTB as follows:

BASIC TEST BATTERY	ARMED SERVICES VOCATIONAL APTITUDE BATTERY
General Classification Test (GCT)	Word Knowledge (WK)
Arithmetic Reasoning (ARI)	Arithmetic Reasoning (AR)
Mechanical Comprehension (MECH)	Mechanical Comprehension (MC)
Clerical (CLER) or Coding Speed Test (CST)	Numerical Operations (NO) and Attention to Detail (AD)
Shop Practices (SHOP)	Shop Information (SI)
Electronics Technician Selection Test (ETST)	Electronics Information (EI), and Mathematics Knowledge (MK), and General Science (GS)

d. The ASVAB has three other subtest areas which are not currently utilized by the Navy in selection for any schools or ratings, but may be utilized in the future. They are the General Information (GI), Space Perception (SP), and the Automotive Information (AI). Forms 6 and 7 also include a Classification Inventory section which will provide four scores. These scores will be utilized in the future.

3. Implementation

a. The ASVAB was implemented on 1 January 1976 by all services as the single recruiting and classification test. ASVAB scores will be reflected on the Enlisted Classification Record (NAVPERS 1070/603) in lieu of BTB scores in the same Navy Standard Score (NSS) format as BTB scores. Maximum scores will be in the mid-70's and minimum scores in the mid-20's.

b. Presently recorded BTB scores will remain valid and will continue to be utilized for selection for class "A" schools and programs. ASVAB qualifying scores will be published as school and program criteria along with BTB qualifying scores.

c. Personnel with BTB scores will not be retested on the ASVAB to determine eligibility for school or programs. Personnel desiring retesting in accordance with BUPERSMAN 1440260 will continue to be retested with an alternate version of the BTB until sufficient versions of the ASVAB are promulgated.

4. Comparability. In most instances, the ASVAB qualifications for a particular school or program can be readily ascertained by matching the BTB subtests with the ASVAB equivalents set forth in paragraph 2c above. With the inclusion of several subtests in the ASVAB, the clerical and electronics composites require that additional subtests be included as set forth below:

COMPOSITE	BTB	ASVAB
Clerical	GCT+CLER	WK+NO+AD
Electronics	ARI+double ETST	AR+MK+EI+GS

Enclosure (1) provides ASVAB and BTB test score qualifications to facilitate determination of eligibility for formal training. The qualifications set forth therein should be utilized until reference (a) is revised to include ASVAB qualifications.

5. Cancellation contingency. When incorporated in references (a) and (b).

W. L. McDONALD
Deputy Chief of Naval Personnel

Distribution:
SNDL Parts 1 and 2

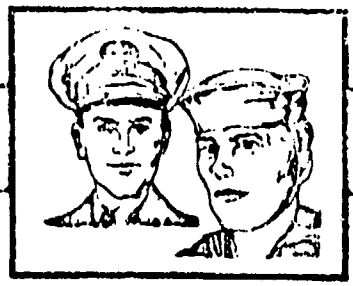
QUALIFICATIONS FOR FORMAL TRAINING

SCHOOL/PROGRAM	BTB MINIMUM QUALIFICATION	ASVAB MINIMUM QUALIFICATION
Aerographer's Mate (AG)	GCT+ARI=110	WK+AR=110
Air Controlman (AC)	GCT+ARI=110	WK+AR=110
Aircrew Survival Equipmentman (PR)	GCT+MECH+SP=156	WK+MC+SI=156
Aviation Antisubmarine Warfare Operator (AW)	GCT+ARI=110	WK+AR=110
Aviation Antisubmarine Warfare Technician (AX)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Aviation Boatswain's Mate (AB)	(3)GCT+ARI=96	WK+AR=96
Aviation Electrician's Mate (AE)	(1)ARI+2ETST=160	AR+MK+EI+GS=212
Aviation Electronics Technician (AT)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Aviation Fire Control Technician (AQ)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Aviation Machinist's Mate (AD)	(3)ARI+ETST=96	AR+MK+EI+GS=193
Aviation Maintenance Administrationman (AZ)	GCT+ARI=105	WK+AR=105
Aviation Ordnanceman (AO)	(3)ARI+ETST=101	AR+MK+EI+GS=201
Aviation Storekeeper (AK)	GCT+ARI=105	WK+AR=110
Aviation Structural Mechanic (AM)	(3)GCT+MECH=96	WK+MC=96
Aviation Support Equipment Technician (AS)	GCT+MECH+SHOP=156	WK+MC+SI=156
Boiler Technician (BT)	GCT+MECH+SHOP=156	WK+MC+SI=156
Builder (BU)	GCT+MECH+SHOP=150	WK+MC+SI=150
Communications Technician, Administrative (CTA)	GCT+CLER=110	WK+NO+AD=163
Communications Technician, Interpretive (CTI)	GCT+ARI+CLER=155	WK+AR+NO+AD=206
Communications Technician, Maintenance (CTM)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Communication Technician, Communications (CTO)	GCT+ARI=105	WK+AR=105
Communications Technician, Collection (CTR)	GCT+ARI=100	WK+AR=100
Communications Technician, Technical (CTT)	GCT+ARI=100	WK+AR=100
Construction Electrician (CE)	GCT+MECH+SHOP=156	WK+MC+SI=156
Construction Mechanic (CM)	GCT+MECH+SHOP=150	WK+MC+SI=150
Data Processing Technician (DP)	GCT+ARI=110	WK+AR=110
Data Systems Technician (DS)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Disbursing Clerk (DK)	GCT+ARI=105	WK+AR=105
Electrician's Mate (EM)	GCT+MECH+SHOP=156	WK+MC+SI=156
Electronics Technician (ET)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Electronic Warfare Technician (EW)	GCT+ARI=110	WK+AR=110
Engineering Aid (EA)	GCT+ARI=105	WK+AR=105
Engineman (EN)	GCT+MECH+SHOP=156	WK+MC+SI=156
Equipment Operator (EO)	GCT+MECH+SHOP=150	WK+MC+SI=150

Enclosure (1)

SCHOOL/PROGRAM	BTB MINIMUM QUALIFICATION	ASVAB MINIMUM QUALIFICATION
Fire Control Technician (FT)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Gunner's Mate (GM) (includes GMT ASROC)	GCT+MECH+SHOP=163	WK+MC+SI=163
Gunner's Mate (Technician) (GMT)	GCT+MECH+SHOP=156	WK+MC+SI=156
Hull Maintenance Technician (HT)	GCT+MECH+SHOP=156	WK+MC+SI=156
Instrumentman (IM)	GCT+MECH+SHOP=163	WK+MC+SI=163
Intelligence Specialist (IS)	GCT+ARI=105	WK+AR=105
Interior Communications Electrician (IC)	GCT+MECH+SHOP=156	WK+MC+SI=156
Journalist (JO)	GCT+CLER=110	WK+NO+AD=163
Machinery Repairman (MR)	GCT+MECH+SHOP=156	WK+MC+SI=156
Machinist's Mate (MM)	GCT+MECH+SHOP=156	WK+MC+SI=156
Mess Management Specialist (MS)	GCT+ARI=100	WK+AR=100
Mineman (MN)	GCT+MECH+SHOP=156	WK+MC+SI=156
Missile Technician (MT) (Polaris Electronics School)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Molder (ML)	GCT+MECH+SHOP=156	WK+MC+SI=156
Operations Specialist (OS)	GCT+ARI=110	WK+AR=110
Opticalman (OM)	GCT+MECH+SHOP=163	WK+MC+SI=163
Ocean Systems Technician (OT)	GCT+MECH+ETST=156	WK+MC+MK+EI+GS=258
Patternmaker (PM)	GCT+MECH+SHOP=156	WK+MC+SI=156
Personnelman (PN)	GCT+ARI=110	WK+AR=110
Photographer's Mate (PH)	GCT+ARI=105	WK+AR=105
Postal Clerk (PC)	GCT+ARI=110	WK+AR=110
Quartermaster (QM)	(3)ARI+SHOP=101	AR+SI=101
Radioman (RM)	GCT+ARI=100	WK+AR=100
Ship's Serviceman (SH)	GCT+ARI=100	WK+AR=100
Signalman (SM)	GCT+ARI=105	WK+AR=105
Sonar Technician (SURFACE) (STG)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Sonar Technician (SUBMARINE (STS)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Steelworker (SW)	GCT+MECH+SHOP=150	WK+MC+SI=150
Storekeeper (SK)	GCT+ARI=105	WK+AR=105
Torpedoman's Mate (SURFACE) (TM)	(3)ARI+MECH=96	AR+MC=96
Torpedoman's Mate (SUBMARINE) (TM(SUB))	(3)ARI+MECH=96	AR+MC=96
Tradevman (TD)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Utilitiesman (UT)	GCT+MECH+SHOP=150	WK+MC+SI=150
Yeoman (YN)	GCT+CLER=110	WK+NO+AD=163
Avionics Group (AV)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Polaris Electronics (PE)	(1)ARI+2ETST=171	(2)MK+EI+GS=163,+AR=225
Submarine (SUBSN)	GCT+ARI=100	WK+AR=100
(SUBFR)	GCT+MECH+SHOP=150	WK+MC+SI=150

NOTES:
(1) 2ETST means to double the ETST
(2) In arriving at the qualifying composite, first add the MK, EI, and GS. If the result is less than 163, the individual is not qualified. If 163 or higher, add the AR; final total must be 225.
(3) Change in criteria from reference (a).



For Your INFORMATION

A NEW CLASSIFICATION TEST BATTERY HAS BEEN IMPLEMENTED

Personnel being tested for enlistment into the Navy on and after 1 JAN 1976 will be given the Armed Services Vocational Aptitude Battery (ASVAB). In the past, personnel tested with the ASVAB under the High School Testing Program have been administered the Basic Test Battery (BTB) at the training center and the ASVAB scores superseded. A new form of the ASVAB has been developed, however, and will now be used in lieu of the BTB. Personnel with BTB scores WILL NOT be retested with the ASVAB, however. Either BTB or ASVAB scores will be used to qualify for all programs. To facilitate comparison, there are sections in the ASVAB that compare with each section in the BTB, thereby permitting establishing both ASVAB and BTB qualification scores for schools and programs. In addition, there are some new sections in the ASVAB which will be used in the future to establish qualifications for schools or programs.

Personnel tested on the BTB (or ASVAB) and who qualify for retesting in accordance with BUPERSMAN Article 1440260 will still be retested with an alternate form of the BTB until sufficient forms of the ASVAB are developed to completely replace the BTB. This process will take a few years to accomplish. The criteria for basic battery retesting in BUPERSMAN 1440260 are unchanged.

In summary, you should consider that the ASVAB is merely the substitution of another form of a basic test battery as has been accomplished throughout the years when a BTB has been superseded by a current form.

Subtest comparisons are:

BTB	ASVAB
GCT	VK (Word Knowledge)
ARI	AR (Arithmetic Reasoning)
MECH	MC (Mechanical Comprehension)
CLER	NO (Numerical Operations) and AD (Attention to Detail)
SHOP	SI (Shop Information)
ETST	EI (Electronics Information), MK (Mathematics Knowledge), and GS (General Science)

BUPERSNOTE 1336 of 3 March 1976

Display on Bulletin Board and Publish as Appropriate, then Destroy

Inclusion in Plan of the Day Notes is Recommended

VII

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